

SCHOOL OF MEDICINE  
AND HEALTH SCIENCES



ANNUAL REPORT  
Academic Year  
**2014-15**

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**THE GEORGE  
WASHINGTON  
UNIVERSITY**

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WASHINGTON, DC

# Dean's Letter



In the pages of this annual report, we have highlighted the milestones and events taking place at GW School of Medicine and Health Sciences. As each year passes, we are pleased to communicate our past accomplishments and our future plans.

In the spring of the 2014–15 academic year, SMHS announced a new strategic plan outlining key themes for attention and growth. As we move through the next several years, we plan to focus on further development in the following areas:

**Leadership:** SMHS is promoting a culture of excellence through leadership, performance improvement, professionalism, and diversity and inclusion for students, faculty, and staff;

**Education:** SMHS is positioning itself to lead the nation in innovative medical and health sciences education and training;

**Discovery:** SMHS is augmenting the research portfolio to elevate our prominence through its quality and impact;

**Community:** SMHS is becoming nationally recognized for our commitment to health equity in local and international communities through research, service, education, and advocacy; and,

**Excellence:** SMHS and its clinical partners are gaining national recognition for clinical excellence.

We've made significant progress over the past year toward reaching our institutional goals, and every day we are working toward attaining higher levels of excellence.

This report illustrates the important scientific discoveries that have been made, and highlights success in transferring our research to the bedside

of our patients. Our clinicians continue to offer the most advanced health care available, and our researchers consistently publish in the most prestigious medical journals. We are proud of our diverse community, and have highlighted the depth of experience that informs our pathways to success. We are educating our students to successfully deliver high-quality and compassionate health care in the 21<sup>st</sup> century. And, we are working diligently to address health disparities and attain health equity.

We have welcomed several renowned clinicians and scientists to SMHS to help lead our efforts in becoming the pre-eminent medical campus in Washington, D.C. and the nation.

Among the many new initiatives at GW, a significant commitment was made to advance the University's efforts around cancer. Over the coming year, you will see that we are building upon our cancer portfolio. Additionally, the GW Hospital has relaunched its kidney transplantation program – performing the first ever three-way kidney exchange in May of 2015. We have also seen growth in the area of neuroscience and are attaining national and international attention for our work in epilepsy and other neurological diseases. Finally, we continue to expand our work around infectious disease. We have a brilliant team that is dedicated to the notion of ending HIV and finding a cure for many of the world's neglected infections of poverty.

I am proud of the work that we've been able to do over the past year; however, it would not have happened without the commitment of our students, residents, faculty, alumni, and staff. The accomplishments we celebrate are a reflection of the enthusiasm and commitment that each person brings to our clinics, classrooms, labs, and offices.

The extraordinary support of our donors is truly one of the most important driving forces that enables and motivates us to innovate and evolve. For that, we are supremely grateful to those who support our efforts and initiatives.

Warmest regards,

**Jeffrey S. Akman, M.D.**

Vice President for Health Affairs  
Walter A. Bloedorn Professor of  
Administrative Medicine  
Dean, School of Medicine and Health Sciences





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The GW School of Medicine and Health Sciences (SMHS) is dedicated to creating the next generation of well-rounded, knowledgeable health care professionals. For M.D. and health sciences students, the curriculum is designed with a more innovative, technological approach, but that's only the start of a valuable education.



"While we have a deep tradition of training highly skilled doctors, we believe these revisions will further enhance the success of our graduates," said Matthew Mintz, M.D.

## THE REVISIONS FOCUS ON FOUR MAJOR AREAS:

- 1 **CURRICULUM DELIVERY:** "active learning" teaching methods
- 2 **EARLY CLINICAL EXPOSURE:** beginning in spring of the second year of medical school
- 3 **NEW CONTENT AREAS:** clinical public health, health policy, diversity, and interprofessional education
- 4 **ENHANCED USE OF TECHNOLOGY:** such as the Clinical Learning And Simulation Skills Center and use of iPads

# A Path in a New Direction

The revised M.D. curriculum, which was put into place at the start of the 2014-15 year, incorporates clinical skills earlier in order to help students meet the needs of a changing health care landscape.

"SMHS has worked to create an environment that is tailored to optimal learning for its medical students," said Matthew Mintz, M.D. '94, RESD '97, FACP, assistant dean for pre-clinical education and associate professor of medicine at SMHS.

The revisions focus on four major areas: curriculum delivery, which includes "active learning" teaching methods; early clinical exposure, beginning in March of the second year of medical

school; new content areas, such as the implementation of the new health care law, and topics related to public health, health policy, diversity, and interprofessional education; and an enhanced use of technology, such as that found in the Clinical Learning And Simulation Skills Center.

"Health care is continuously evolving, and with the dramatic shifts in medicine and medical education, it is important for our school to support innovation in medical education and remain on the cutting edge," said Jeffrey S. Akman, M.D. '81, RESD '85, vice president for health affairs, Walter A. Bloedorn Professor of Administrative Medicine, and dean of SMHS.



# From Campus to Capitol Hill

It was an “only at GW moment,” said Ramzi Dudum, a member of the SMHS M.D. Class of 2016. Dudum, along with his classmates, had earlier visited Capitol Hill, where they met **Congressman and physician Ami Bera**. Dudum, a member of the SMHS Student Council, had such a positive experience with Bera that he invited the politician to meet with students at GW. Conflicting schedules ensued, until Dudum happened to run into Bera at the barber shop.

“One word,” Dudum said. “Serendipity.”

Bera agreed to a lunch, and in early April 2015, he came to Ross Hall and spoke with a few dozen SMHS medical students about his life, his experiences, the role of government, and the new health care law. “This was the reason I chose GW: access to policy-makers and the opportunity to work with a diverse patient population,” said Dannah Farah,

M.D. Class of 2017, who attended the lunch.

The lunch was only one of several interactions between GW students and Capitol Hill. At the **15th annual Health Policy Grand Rounds**, also held in early April 2015, SMHS emergency medicine residents visited the Capitol to hear from a panel of speakers, which included SMHS faculty, about the new health care law and its implementation and legislative challenges.

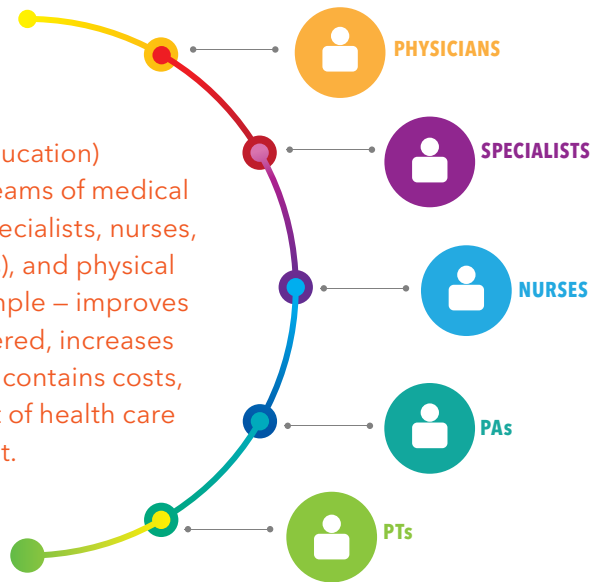
Also on the Hill, Ken Harwood, Ph.D., PT, program director for health care quality, director for research for the Doctor of Physical Therapy program, and associate professor of clinical research and leadership at SMHS, served as a panelist during a May congressional briefing on the Nurse and Health Care Worker Protection Act of 2015.

Additionally, Capitol Hill legislative aides crossed town to the Foggy Bottom campus to immerse themselves in the medical experience. At **Project Medical Education**, a spring event held at SMHS in partnership with the Association of American Medical Colleges, congressional staff members learned about the fundamentals of medicine, with discussions including medical school, residency, and research.



## IPE THEORY

IPE (interprofessional education) communication within teams of medical workers – physicians, specialists, nurses, physician assistants (PAs), and physical therapists (PTs), for example – improves the quality of care delivered, increases patient satisfaction, and contains costs, which are all at the heart of health care reform and development.



## A Team Approach to Care

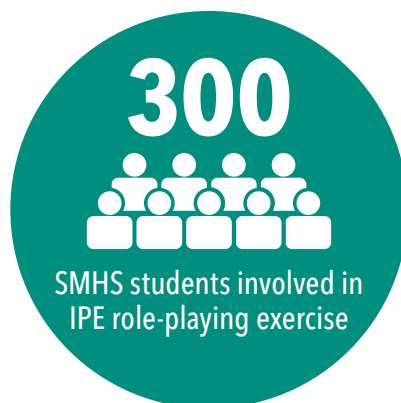
Interprofessional education has become key to modern medical education.

With a 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 the school is uniquely positioned to shape its medical education with the IPE movement. “We have so many different kinds of health profession students here at GW [that] we have a real opportunity to set the national standard for IPE best practices,” Simons said.

In fall 2014 and spring 2015, more than 300 first-year medical students, second-year PT students, speech-language pathology students, and regis-

tered nursing students gathered for workshops that introduced role-playing as a means of communication. Students also completed peer evaluations, a tool for them in assessing their performance and communication skills with others.

SMHS leadership is working closely with faculty and students to modify sessions based on feedback and is continuing to look for opportunities at shared clinical sites.



## The Science of Translation

The SMHS Ph.D. in Translational Health Sciences program — open to licensed health practitioners, educators, health care administrators, and public health officials — prepares students for generating and teaching new knowledge about the processes and outcomes of translating, disseminating, and implementing evidence-based practice.

The Ph.D. in Translational Health Sciences requires 54 credits beyond a master’s degree and focuses on three main areas:

-  Professional health care education
-  Health care practice
-  Translational research

Students must complete two comprehensive examinations, a proposal defense, and a defended dissertation. The low-residency curriculum includes online learning activities and campus classes, held two weekends per semester, at the Virginia Science and Technology Campus in Ashburn, Virginia.

“Right now, when new discoveries are made, it takes too long for them to reach the public and affect complex health conditions that require a sustained and widespread response,” said Joseph Bocchino, Ed.D., M.B.A., senior associate dean for health sciences at SMHS. “Our goal is to create a field of experts and educators who understand how to expedite the process and integrate science from the bench to the bedside.”

# A Changing Environment: Clinical Public Health

In creating the next generation of well-rounded physicians, SMHS has incorporated a vital aspect of medicine into the M.D. curriculum: **clinical public health.**

The clinical public health course includes multiday intercession workshops held at the end of the fall and spring semesters. The fall 2014 clinical public health intercession, **"How Physicians Can Help Create an AIDS-Free Generation,"** 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 care continuum, but also to identify how to do it at the community level.

"GW students will continue to graduate as excellent clinicians, but they will practice in a health care system that is changing dramatically," said Lawrence Deyton, M.D. '85, M.S.P.H., senior associate dean for clinical public health and professor of medicine at SMHS.

During the intercession, first-year medical students attended, among other activities, a White House event featuring top government and public health HIV/AIDS leaders. There, student working groups presented community-based plans to improve the HIV care continuum.



Anthony S. Fauci, M.D., director, National Institute of Allergy and Infectious Diseases, addressed first-year M.D. Program students during the clinical public health intercession.

The spring 2015 clinical public health workshop, **"Eliminate Childhood Asthma in Washington, D.C.,"** was held after classes on pulmonary medicine and immunology/allergy.

"The District of Columbia and many similar urban environments constitute a perfect storm of adverse circumstances for diseases such as asthma," said Stephen J. Teach, M.D., M.P.H., professor and chair of the Department of Pediatrics at SMHS, and director and investigator of the pediatric asthma clinic IMPACT DC.

In Washington, D.C., genetic and epigenetic factors contribute to negative environments, including poverty, poor housing, and inadequate

access to primary care. At the intercession workshop, students gave their recommendations for how to tackle these complex community health problems.

# 178



first-year SMHS M.D. program students presented clinical public health projects at the White House as part of their curriculum



# A Perfect Match

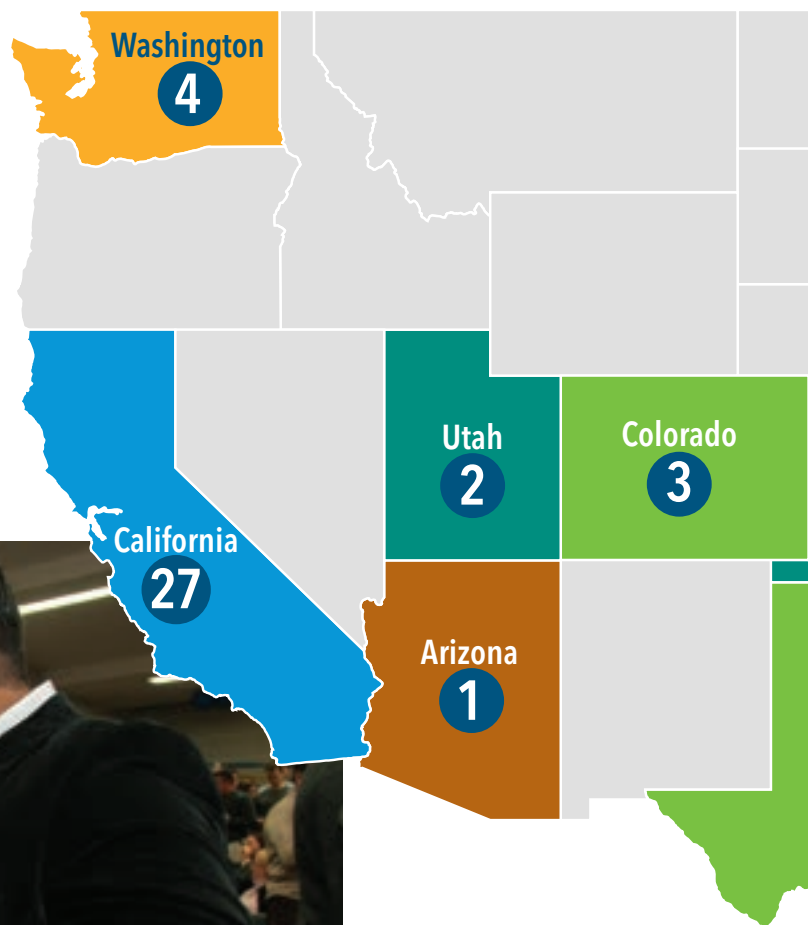
**M**atch Day, held this year on March 20, 2015, marks one of the most important and exciting moments in students' medical education — the transition between medical school and residency. At noon, students across the country received and opened their envelopes from the National Resident Matching Program, a nonprofit corporation established to provide a uniform date of appointment to positions in graduate medical education in the United States.

With a **100 percent match rate**, SMHS students matched with, among others, Duke University, Ohio State

University Wexner Medical Center, Cedars-Sinai Medical Center, and the University of Virginia. Six students continued their training at GW, and two continued their 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, and the best of what GW does," said Peter B. Kovler, member of the GW Board of Trustees and chairman of the board of the Blum-Kovler Foundation. Kovler's son, Mark, matched at Johns Hopkins in general surgery.

## LOCATIONS WHERE SMHS STUDENTS MATCHED IN 2015



Dalya Elhady, M.D. '15, with her family, opens her envelope to find that she has matched in her top-choice residency program.





## TOP RESIDENCIES

INTERNAL MEDICINE | 33

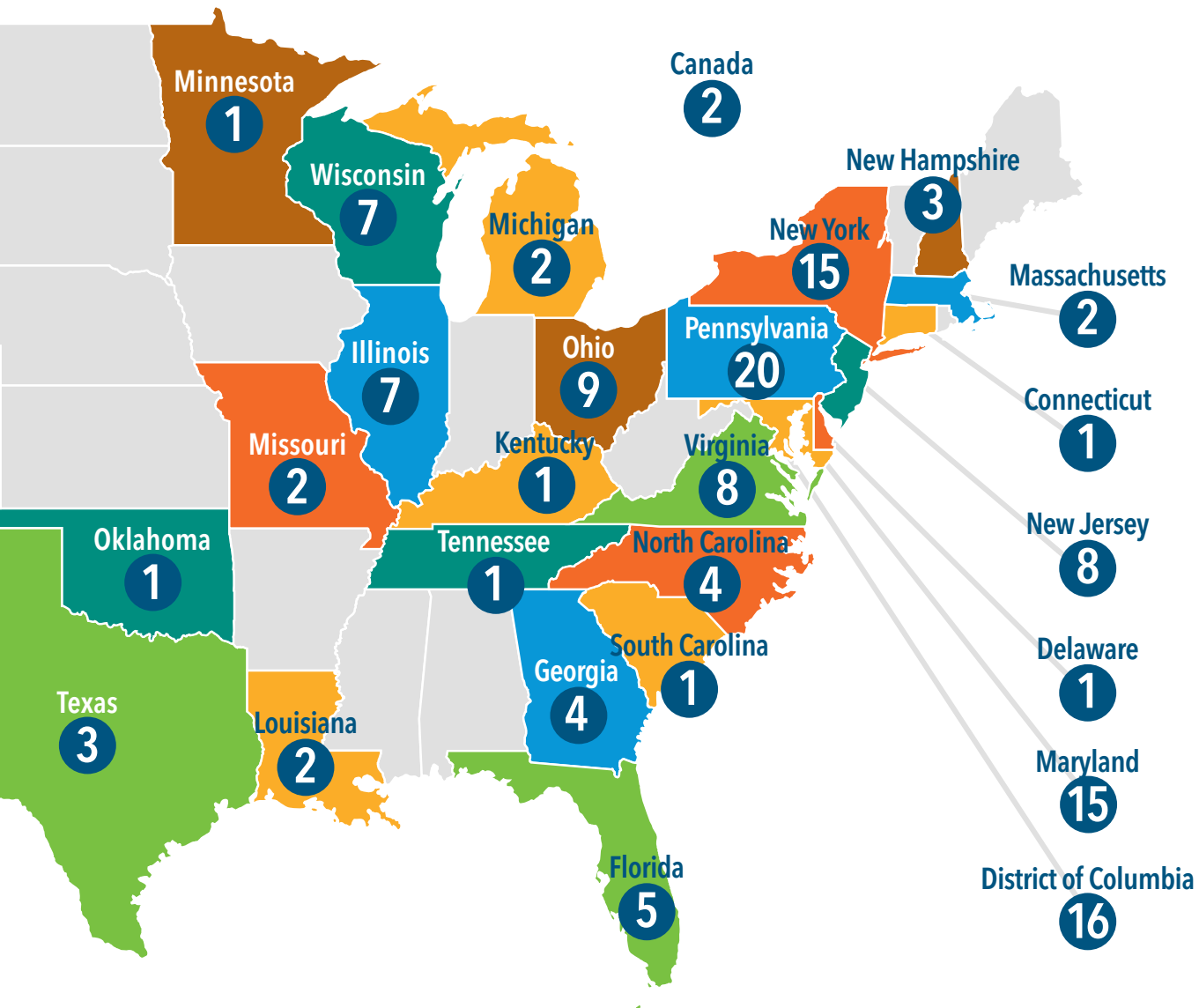
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**100%** 2015 National Resident Matching Program match rate



## The Wave of Technology

As SMHS adopts a paperless curriculum, many incoming students receive iPads with an array of preloaded applications, such as interactive reference materials, which help them learn and better understand medical science and practice. The iPads represent a schoolwide shift to a more technologically advanced curriculum that places an emphasis on active learning principles, with technology as a key tool.



Faculty-created iBooks include embedded videos and quizzes.



iPads are used to track attendance and serve as “clickers” for audience response systems.



iPads replace computers for viewing slides in histology and pathology courses.



Students can use their iPads to easily access medical databases, full-text journals from Himmelfarb Library’s online collections, and clinical tools such as medical calculators and medication references.



Faculty members in the M.D. program can use iPads to investigate applications in the clinical environment, including accessing electronic medical records.

## Skin Deep

At the start of the 2015 academic year, SMHS started a new dermatology residency program. Residents are mastering the medical, surgical, and histopathological components of dermatology, while working with a multicultural and socially diverse patient population in Washington, D.C. They also gain key investigative skills through a unique required research project, supported by a clinical research program headed by Alison Ehrlich, M.D. '96, RESD '97, M.H.S., professor and chair of the Department of Dermatology at SMHS.

The curriculum provides comprehensive instruction

and exposure in medical dermatology, dermatologic surgery, pediatric dermatology, dermatopathology, consultative inpatient dermatology, and other subspecialties for two residents each year. They rotate through ambulatory clinics and inpatient consultation services at the GW Medical Faculty Associates, the Washington DC VA Medical Center, and Children’s National Health System. Additionally, residents’ clinical training is matched with clinical conferences and didactic lectures delivered by faculty from both SMHS and the D.C. community.



## A Firm Foundation

SMHS has opened the door to a new program for candidates looking to build a foundation for their medical education career. The post-baccalaureate pre-medicine certificate program, which opened in summer 2015, is designed to provide those interested in applying to medical school — but lacking course work in general and organic chemistry, biology, and physics — the necessary curricular experience to perform well on the newly reworked MCAT exam.

The program offers preparatory professional skills necessary for completing the medical school admission process, including interview and application completion strategies. It is part of an ongoing expansion of the health sciences at SMHS and takes place in the new laboratories and facilities at the GW Virginia Science and Technology Campus in Ashburn, Virginia.





## On the Right Track

In furthering students' medical careers, SMHS offers a selection of track programs designed to increase exposure to leadership opportunities and offer a broader perspective on the field of health care. The Office of Student Opportunities (OSO) has tracks in:

- Clinical practice innovation and entrepreneurship
- Clinical and translational research
- Community/urban health
- Emergency management
- Global health
- Health policy
- Integrative medicine
- Medical education leadership
- Medical humanities

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**About this image:** Students in the global health track have the opportunity to hone their skills through summer internship programs offered through OSO, as well as international clinical rotations and medical missions offered through the Office of International Medical Programs (IMP). Here, an SMHS student participates in the IMP Project Medishare mission in Themonde, Haiti.

Health care doesn't take place only in hospitals, and learning isn't limited to classrooms. For the GW School of Medicine and Health Sciences (SMHS), both are practiced hand in hand with communities at home and abroad.

# The Next Generation

**W**ith a hands-on, immersive approach to medicine and health care, the SMHS DC Health and Academic Preparation Program (DC HAPP), supported by the Office of Diversity and Inclusion, allows qualifying students to explore a potential career path. Each participant must receive a recommendation from a teacher or guidance counselor, be a rising high school senior in a D.C. public or charter school, and be in need of financial support.

For the students in Cohort 3, who participated in summer 2015, their initiation started with a white coat ceremony led by Yolanda Haywood, M.D., RESD '87, B.S. '81, associate dean for diversity, inclusion, and student affairs, and associate professor of emergency medicine at SMHS.

"This ceremony is for you to remember, to lock that into your head that you will be successful, and we will be here to help ensure that you're going to be successful," Haywood said.

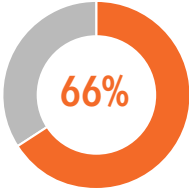
The ceremony was the first step; those that followed over **the four-week program included a visit to the Gross Anatomy Lab; CPR certification training; a trip to the VA Medical Center; a**

**course in suturing at the Washington Institute of Surgical Endoscopy lab; and a stop at the birthing simulation center in the Clinical Learning And Simulation Skills Center.**

"This [program] is going to determine what I'm going to do with my future," said participant Sandra Lopez. "I'm one year away from college, and I want to be ready with my decision of what I really want to do."







# Partnering to Promote Health Equity

Washington, D.C., particularly Ward 8, home of one of the city’s highest poverty rates, experiences severe health gaps, but remedies are ongoing, thanks to the efforts of the Rodham Institute. In November 2014, the Institute, which is housed within SMHS and supported by clinical partner the GW Medical Faculty Associates, held its second annual summit to promote health equity.

“The goal today is to first acknowledge the work that has already been done, to catch people up on the Rodham Institute’s progress, and to continue to inspire people who are already doing the work,” said Jehan “Gigi” El-Bayoumi, M.D., RESD ’88, founding director of the Rodham Institute and associate professor of medicine at SMHS.

**The concept of the Institute came after a conversation between El-Bayoumi and Dorothy Howell Rodham, mother of Hillary Rodham Clinton.** “I was friends with Mrs. Rodham,” said El-Bayoumi. “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.”

The Rodham Institute, founded in 2013 in honor of Rodham, seeks to apply the transformative power of education to help current and future health care providers achieve health equity in Washington, D.C. At the summit, discussion — led by El-Bayoumi, Clinton, and Rain Henderson, CEO of the Clinton Health Matters Initiative — centered on the Institute’s strategic plan and accomplishments.

Together with the Milken Institute School of Public Health at GW and more than 20 community partners from across the city, the Institute received a grant from the Centers for Medicare and Medicaid Services to study a new model that aims to



improve HIV prevention and care while lowering health care costs. The Institute, among other initiatives, also coordinated several volunteer experiences for medical students and residents at Food and Friends, an organization dedicated to caring for people living with HIV/AIDS by preparing and delivering specialized meals.

The Third Annual Rodham Institute Summit, featuring Chelsea Clinton, took place in October 2015 at the THEARC in southeast D.C. Topics included childhood obesity, access to mental health care, and the importance of community health partnerships.

## THE RODHAM INSTITUTE

**8** health equity training events were sponsored in 2014-15 by the Rodham Institute for GW health learners.

**300+** Washington, D.C. residents participated in the Barry Farm Healthy Living Festival, co-sponsored by the Rodham Institute and community-based partners such as the Ward 8 Youth and Family Development Model Community Hub. More than 100 GW SMHS students and faculty participated in the event held in one of the city’s most medically underserved neighborhoods.

# The Fight Against HIV/AIDS: Guiding the Nation's Top Leaders

**J**effrey S. Akman, M.D. '81, RESD '85, vice president for health affairs, Walter A. Bloedorn Professor of Administrative Medicine, and dean of SMHS, took his leading role in HIV/AIDS

treatment another step further in May 2015: He was sworn in as a new member of the Presidential Advisory Council on HIV/AIDS.

Akman joins prestigious and diverse leaders from local and national communities, as well as leaders from science, medicine, public health, business, and philanthropic organizations. The council regularly provides recommendations on how to effectively implement the National HIV/AIDS Strategy, and monitors the strategy's implementation.

Akman, who began treating patients living with HIV/AIDS in the early days of the epidemic, has advised physicians, research institutes, and medical organizations on the need for mental health and substance use care to be included in HIV/AIDS treatments. He has served as a principal investigator for a National Institutes of Health grant to train and educate health care professionals in the medical and mental health aspects of the disease, and has provided leadership and advisement for many HIV/AIDS-related initiatives.



Jeffrey S. Akman, M.D.



## Preparing for an Emergency

**T**he U.S. Department of Homeland Security's Federal Emergency Management Agency awarded a \$1.3 million Continuing Training Grant to SMHS. GW's Health Sciences program was one of the first in the nation to offer an emergency medical services degree program, and the program has a history of providing training and education to the nation's first responders. The grant will support further development of the National Preparedness System to create training programs and resources to better prepare citizens and responders for mass casualty events.

**The training is based on the tenets of Tactical Emergency Casualty Care (TECC), a set of evidence-based, best-practice medical treatment guidelines.** Additionally, the training will include the Rescue Task Force (RTF) response model, which enables law enforcement, fire, and emergency medical services personnel to deploy in a coordinated effort to cleared, but not secured areas to rescue survivors and initiate treatment.

In 2011, GW experts and clinicians helped develop TECC, and faculty and staff have worked closely with various agencies to assist with the development and training of RTF and other "warm zone" response models, both domestically and internationally.





## Expanding Health

In early spring 2015, the GW Healing Clinic opened a second site, Bridge to Care, in Prince George's County, Maryland. Located at the Cheverly Health Center, the student-run clinic offers primary and preventive care, health education, and counseling to D.C. metro area residents, regardless of their ability to pay.

"The area we are serving has more than 40,000 people with extremely limited access to primary care," said third-year M.D. student Laura Johns.

In 2007, a Medicine in the Community Grant from the Association of American Medical Colleges enabled SMHS to open the first GW Healing Clinic at Bread for the City, a non-profit organization in Northwest, D.C.

"The GW Healing Clinic speaks to the whole service commitment of the school," said Jeffrey S. Akman, M.D. '81, RESD '85, vice president for health affairs, Walter A. Bloedorn Professor of Administrative Medicine, and dean of SMHS. "Our students couldn't be more enthusiastic about their involvement."

In 2015, the GW Healing Clinic received the Cyril A. and Margaret B. Schulman Distinguished Service Award, providing \$20,000 each year for the next four years. Established in 1992 by Cyril A. Schulman, M.D. '42, B.S. '38, A.A. '37, and his wife Margaret, J.D. '58, B.A. '38, A.A. '36, the award recognizes efforts to provide medical services to the community.

## Upward Bound

Washington, D.C. high school seniors with an expressed interest in medical and allied health careers gather each summer on the GW campus to participate in SMHS' Upward Bound (UB) program. Designed to ease the transition from high school to a four-year college, UB — one of eight federal TRIO programs — prepares students from low-income families by offering supplemental instruction, SAT preparatory and financial aid workshops, and college tours. Students take classes in core subjects such as English composition and literature, integrated mathematics, foreign language, and laboratory science, and get exposure to college life by living on campus.

## A Hands-on Approach

**W**ith instruction from Ashkan Monfared, M.D., associate professor of surgery at SMHS, and his colleagues from Global ENT Outreach, El Centro de los Sentidos, and Clinica de Marly, **residents and fellows in Bogota, Colombia, received hands-on training in complex otologic surgeries in early 2015.**

“It was a great opportunity to work with these medical trainees in Colombia and assist in sharpening their surgical skills so they can significantly improve outcomes for patients with otologic disorders,” said Monfared of the inaugural Advanced Otology and Temporal Bone Course.

The training, funded by Clinica de Marly CEO Luis Cavelier, M.D., took place over two days. Two local medical equipment firms supplied the course’s drills and microscopes, and staff members volunteered their time. Monfared’s participation was supported by the Ruth Uppercu Paul Fund for Hearing Health and Rehabilitation.

In addition to providing clinical direction and didactic course work, Monfared assisted in mission development for a charitable hearing health organization founded by Martin Fernandez, M.D., one of Monfared’s partners in the Advanced Otology and Temporal Bone Course; the organization will be the first of its kind in Colombia.



Bruno Petinaux, M.D., RESD '02, on site in Nepal.

## A Piece of the Rescue Puzzle

**T**he boy’s name was Pemba Tamang, and he was 15 years old. When a 7.4-magnitude earthquake struck Nepal in late April 2015, Tamang was speeding out of a hotel parking garage on his motorbike. The garage pancaked on top of him, and he spent days waiting for rescuers to come. And they did.

The Fairfax County Urban Search and Rescue Team had only begun its annual three-day exercise when news of the devastation hit. The team, luckily already prepared, jumped on an airplane. As soon as the 57 volunteers, including Bruno Petinaux, M.D., RESD '02, associate professor of emergency medicine at SMHS, and Medical Director of Fairfax County Urban Search and Rescue Anthony Macintyre, M.D., RESD '96, professor of emergency medicine at SMHS, landed, they got to work. While structural engineers and specially trained squads assessed

the feasibility of rescue attempts, Petinaux and Macintyre worked to sustain the lives of those entombed — including Tamang.

“Some of these extrications can take many hours, so delivering the care as soon as we can is vital,” Macintyre said. Tamang’s rescue took hours, though he escaped with only scrapes and bruises, thanks to a pocket of space created by his motorbike. **Injuries sustained by those entombed or trapped after an earthquake cover a spectrum of minor cuts and bruises to major life-threatening trauma, known as “crush syndrome.”**

Although Macintyre and Petinaux’s team, known as USA-1 on their international deployment, achieved several successful rescues, the physicians view their efforts simply: “[We’re] just one piece of the puzzle,” Petinaux said.



# A Humanitarian Response

The Ebola Treatment Units (ETUs) in Liberia were prepared: Four to six graves were ready at all times. “Sometimes there would be that many patients passing in a day,” explained Colleen Kovach, M.D., clinical instructor of emergency medicine at SMHS and volunteer in Liberia. “It was a terrible thing to see.”

Kovach, along with Brian Burt, PA-C '03, B.A. '96, and Mark McKinnon, PA-C '03, were witness to the destructive nature of the disease in late fall and early winter 2014. Kovach treated Ebola-infected Liberians, while Burt and McKinnon deployed with the United States Public Health Service Commissioned Corps to provide care to infected health care workers. Conditions were hot and humid, and supplies were basic. Given that needlestick injuries carried a nearly 100 percent infection rate, the ETUs had a constant rotation of patients, many from the same families.

“You never knew who was going to survive,” Burt said. “One day you’d go see the patient, and they’d be in complete renal failure with massive, life-threatening electrolyte disturbances. Then the next time you came back, they’d be nearly turned around. On the other hand, you’d have somebody that was doing great and the next day you’d come, they’d be dead.”

Despite the heartache of lost patients, the trio of volunteers departed with memories of survivors, survivor ceremonies — colorful ribbons tied to a tree, yellow handprints slapped on a blue wall — and a desire to keep helping.

“I love the humanitarian response,” said Kovach, who headed to the Turkey–Syria border in summer 2015. “I’m hoping to make a career out of it.”



12,000+ faculty, students, residents, fellows, and staff have participated in one of the International Medicine Programs opportunities that are run in association with some 90 partnering institutions in more than 50 countries around the world.

## IMP PROGRAMS

### GW SCHOLARS

- **The Global Health Track** is designed to increase GW medical students' awareness about international health systems, global diseases, and assessment techniques for the specific health needs of countries at various stages of development.
- **International Clinical Rotations and Medical or Surgical Missions** are designed to provide GW medical students with an opportunity to enrich and diversify their medical education in an international physical and social setting.

### INTERNATIONAL SCHOLARS

- **M.D. Program for International Students**  
The four-year program provides international students with an SMHS medical education, and prepares them to return to their home countries to practice medicine.
- **Summer Research and Medical Enrichment**  
This five-week summer program provides access to research and medical enrichment opportunities at both GW and the NIH for talented third- and fourth-year international medical students.
- **International Clinical Rotations** provide international students with an opportunity to enrich and diversify their medical education in a U.S. health care system setting.
- **The Observer Training Program** is designed for international medical graduates who wish to update their clinical and educational skills in a particular specialty.
- **The Medical Research Fellowship Program** is intended to provide international medical graduates with the skills necessary to enhance their research careers and pursue residency training in the United States.
- **The International Residency Program** provides international medical graduates with a strong clinical experience as well as a basic overview of the U.S. medical system as it is carried out at SMHS.
- **The International Fellowship Program** allows international physicians to increase their knowledge and skills of a particular subspecialty beyond that of a Residency Training Program.

The “next big thing” in clinical care at the GW School of Medicine and Health Sciences (SMHS) is never just one innovation or one person, but several.

# A Rock Star

**J.** Keith Melancon, M.D., chief of the Division of Transplant Surgery, director of the Transplant Institute at GW Hospital, and professor of surgery at SMHS, is commonly described as a “rock star.” He’s broken the world record for kidney swaps four times, and in June 2015 — with classic rock, naturally, playing in the background — he completed the first-ever three-way paired kidney exchange at GW Hospital.

“The unique nature of the exchange was the fact that all of these recipients had received kidney transplants many years ago and were in need of new transplants, but their loved ones did not match,” he explained. That’s when the daisy chain, Melancon’s term when donors give kidneys that don’t match their loved ones in exchange for those that do, took effect. It’s a trend that Melancon, through GW’s transplant program, is hoping will continue to gain strength. “We always aggressively push for local paired kidney exchange



Thomas Jarrett, M.D., professor and chair of the Department of Urology, removes a healthy kidney from a donor.



Kidney donors and recipients from GW Hospital's first three-way paired kidney exchange met during a reception in Ross Hall in November 2015.

because it is the quickest, most convenient, most cost-effective, and most reliable means of transplanting the most patients,” he explained.

Around 26 million Americans suffer from chronic kidney disease, but fewer than 400,000 of them have received kidney transplants, according to the National Kidney Foundation. The issue is heightened in Washington, D.C., which has one of the highest rates of kidney disease in the country. Live donors are particularly valuable, as

the short- and long-term outcomes tend to be better, and live kidneys can last longer than those from deceased donors. **Kidney transplants are also significantly more affordable than long-term dialysis, which can cost \$80,000 to \$100,000 per year; a transplant runs about \$30,000, Melancon estimated.**

In an effort to increase education about kidney transplantation, Melancon has engineered a partnership with the Minority Organ and

Tissue Transplant Education Program to inform the minority community — who tend to be more at risk for kidney disease and more likely to need a transplant — on the facts of donation.

“What I concentrated on was, ‘let’s see if we can help people in the hardest-to-transplant areas, and it will translate into more transplants for everyone who is difficult to transplant,’” Melancon said. “That is my strategy.”





31

The number of life-saving kidney transplants, including GW Hospital's first three-way paired exchange, performed at the GW Transplant Institute during the 2015 inaugural year.

# Free From Falls

In helping those who find it difficult to walk or stay balanced, SMHS' Doctor of Physical Therapy (DPT) program and the National Capital Chapter of the National Multiple Sclerosis (MS) Society have united to offer "Free From Falls."

The program, held on GW's Foggy Bottom campus, is a national initiative designed by the MS Society to teach people with MS how to minimize the risk of falling. The eight-week curriculum provides an hour of "Fall Awareness" classroom instruction and an hour of "Building Better Balance" exercises each week.

"With the MS Society providing the 'Free From Falls' program and the connections to potential participants, and with the DPT program



## A TEAM OF SIX GW FACULTY MEMBERS COLLECTED DATA FROM PRE- AND POST-TEST OUTCOME MEASURES TO DETERMINE THE EFFECTIVENESS OF THE PROGRAM.

providing the space and faculty and student resources, this was an ideal situation to work with people with MS to prevent falls," said Sue Leach, Ph.D., PT, assistant professor of physical therapy and health care sciences at SMHS, and one of the leaders of the partnership.

"Free From Falls" not only allows students the opportunity to work directly with those with MS, but it has also provided valuable research data. A team of six GW faculty members collected data from pre- and post-test outcome measures to determine the effectiveness of the program.

### GW MEDICAL FACULTY ASSOCIATES

**376** SMHS residents and **70** fellows

**750+** providers

**50+** specialties

**\$366 MILLION** Total Revenues

**\$16 MILLION** Costs for Providing Uncompensated Care

**\$44 MILLION** Costs for Providing Undercompensated Care



# The Next Big Thing: TAVR

The words most frequently used to describe transcatheter aortic valve replacement, or TAVR, are revolutionary, miraculous, and amazing.

“The fact that we can operate on a patient without invading the body is amazing to me — and I do it!” said Jonathan Reiner, M.D., director of cardiac catheterization and professor of medicine at SMHS. “It’s the next big thing.”

This “next big thing” is a minimally invasive valve replacement procedure that allows high-risk patients to receive treatment. Using the femoral artery as a highway to the heart, surgeons such as Christopher Nagy, M.D., director of structural heart disease and assistant professor of medicine at SMHS, thread the catheter through a half-inch incision in the upper thigh to the artery and, eventually, to the heart. Using a stent and a crimped balloon, they expand the new valve inside the old, allowing blood to pump out of the heart and cleanly through the valve.

Before TAVR, the standard valve replacement therapy meant open-heart surgery, with its accompanying hospital stays, rehabilitation sessions,



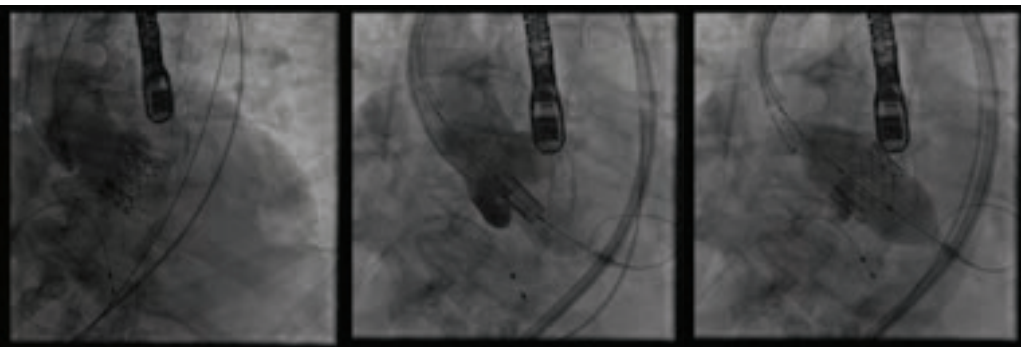
Christopher Nagy, M.D.

risks of infection, and hefty price tags. Those at higher risk, such as the elderly, faced an uphill recovery battle. With TAVR, however, patients come out with a couple of stitches and need as little as a few days to recover.

**30**

Trans Aortic Valve Replacement (TAVR) surgeries performed in 2015, up from 16 in 2014 when the program was launched. Less than 10 weeks into 2016, GW Hospital had already performed six TAVRs.

The procedure, which can also be performed as transapical, or through the ribs and into the tip of the heart, has become routine in Europe, but in the United States, TAVR is limited to only the most seriously ill patients — for now. Since the U.S. Food and Drug Administration’s approval of TAVR in 2011, the pool of eligible patients has continued to expand.



## GW HOSPITAL IN 2015

- 19,141** Total Inpatient (IP) Admissions
- 77,191** ER visits
- 114,924** Outpatient (OP) visits
- 8,389** IP surgeries
- 15,674** OP surgeries
- 24,063** Total IP and OP surgeries
- 3,127** Baby Deliveries

## SURGICAL CASES

- 537** Robotic
- 247** Open Heart
- 991** Spine
- 429** Total Joint Replacement
- 31** Kidney Transplant
- 10** Deep Brain Stimulator (Parkinson’s)
- 9** Vagal Nerve Stimulator (Epilepsy)
- 13** Cochlear Implant
- 3** Extracorporeal Membrane Oxygenation

## CHILDREN’S NATIONAL HEALTH SYSTEM

**140** | Number of years Children’s National Health System (Children’s National) has been serving children in the Washington, D.C. metropolitan community

**1968** | The year SMHS and Children’s National established a clinical partnership basing the school’s Department of Pediatrics at Children’s National and providing joint appointments to the pediatrics faculty members

**280** | Number of third- and fourth-year SMHS medical students receiving pediatric training during clerkship rotations

**475** | Number of research projects investigating diseases such as brain and spinal cord injuries and protection, obesity and type 2 diabetes, renal disease, and autism

## Saving Life and Limb

In Washington, D.C., hypertension, high cholesterol, renal failure, and diabetes are common diseases, but accompanying each is the potential for high-risk complications – including the need for amputation, according to Richard Neville, M.D., chief of the Division of Vascular Surgery and professor of surgery at SMHS. But he saw a powerful alternative to this drastic surgery: limb preservation.

**“I tell patients that we’re not just saving your leg, we’re saving your life,” he said.**

With a cadre of experts – vascular surgeons, podiatrists, orthopedists, infectious disease specialists, and wound care experts – Neville opened the doors of the GW Wound Healing and Limb Preservation Center in August 2014.

The center is critical for those in the community:

- It offers a range of procedures, such as arteriograms, medical clearances, and revascularization;
- It allows patients to complete treatment within a few visits, rather than the standard eight to 10 required by amputation; and
- It is formalizing and expanding its fellowship program and establishing outreach clinics in D.C. neighborhoods, particularly those with the highest prevalence of diabetes and other diseases limiting circulation.





Carrington Sandidge was facing life in a wheelchair after foot pain misdiagnosed as gout turned out to be severe peripheral arterial disease. Neville restored blood flow to the limb with a vascular bypass, saving Sandidge's leg and his independence.

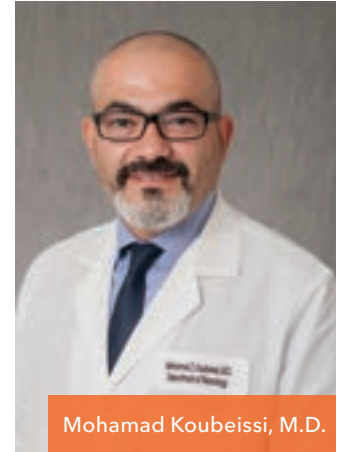


## A Shock to the System

Epilepsy, according to the Centers for Disease Control and Prevention, affects nearly 3 million people in the United States, and another 150,000 are diagnosed every year. **For one-third of those who suffer from uncontrollable seizures, medications do not work** and surgery could impair cognitive function or movement. Mohamad Koubeissi, M.D., associate professor of neurology and director of the SMHS Epilepsy Center, however, has a solution: electrical stimulation.

Koubeissi believes that deep brain stimulation can help those with little treatment recourse, and his research has shown that emitting a low-frequency signal into white brain matter can be effective. “Finding new therapies for epilepsy can make major changes in the lives of many people,” he said. “It’s a very common disease, and it can be horrible. When uncontrolled, it can have a serious impact on people’s social and professional lives.”

Koubeissi has also explored other approaches to epilepsy treatment, including a surgical technique that involves precise incisions made to the hippocampus, which could eliminate seizures while preserving



connections that affect memories. “There is some suggestion that the longitudinal connections, which run the length of the hippocampus from anterior to posterior — front to back — are important for synchronizing the seizure discharges and indispensable for the clinical presentation of seizures,” he said. “By ‘disconnecting’ these, we hope it will have an impact on seizures but be much less detrimental to memory than typical resection, which removes the whole hippocampus.”

Koubeissi, the author of “Seizures in Cerebrovascular Disorders: A Clinical Guide,” has garnered significant attention for his work. In November 2015, he appeared in an episode of National Geographic’s “Breakthrough,” which highlighted his advancements in epilepsy treatments.

“FINDING NEW THERAPIES FOR EPILEPSY CAN MAKE MAJOR CHANGES IN THE LIVES OF MANY PEOPLE.”

In discovering new drug therapies and unraveling the complexities of diseases, GW School of Medicine and Health Sciences (SMHS) researchers have teamed up with organizations, students, and colleagues both within GW and from other institutions to advance the SMHS research portfolio.

# Solving Pediatric Dysphagia

**A**nthony-Samuel LaMantia, Ph.D., director of the GW Institute for Neuroscience and professor of pharmacology and physiology at SMHS, and his team of researchers are unraveling the mystery behind pediatric dysphagia, a feeding and swallowing disease that disproportionately affects those with neurodevelopmental disorders.

Using a genetic mouse model, the research team is conducting a three-pronged, simultaneous approach to dysphagia over a five-year period.

LaMantia and Project Associate Director Sally Moody, Ph.D., professor of anatomy and regenerative biology at SMHS, believe their goals for the project, which is funded by a \$6.2 million grant from the Eunice

USING A GENETIC MOUSE MODEL, THE TEAM IS CONDUCTING A **THREE-PRONGED, SIMULTANEOUS** APPROACH TO DYSPHAGIA OVER A FIVE-YEAR PERIOD.

Kennedy Shriver National Institute of Child Health and Human Development, are bolstered by the strength of the diverse team. “The project was put together to try to attack the problem, or at least analyze the problem, from a multidisciplinary perspective,” Moody explained. “It’s the combination of expertise that we think will allow us to make progress.”





# In the Name of Education

The Emerging Scholars Program at SMHS granted pilot funding to three investigative teams for the 2014-15 year. The program, which supports the scholarly projects of health sciences faculty and staff, focuses on academic advancement opportunities, as well as professional and mentoring partnerships both within and outside GW.

The program, which began in 2012, awarded each team \$10,000, \$25,000, or \$50,000; to date, it has funded a total of eight pilot awards. **Projects from emerging scholars 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.

"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 at SMHS.

The 2014-15 projects include:



"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



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



# The Potential for an HIV Vaccine



Douglas Nixon, M.D., Ph.D., believes an HIV vaccine is a real possibility.

Research co-authored by Douglas Nixon, M.D., Ph.D., chair of the Department of Microbiology, Immunology, and Tropical Medicine and Walter G. Ross Professor of Basic Science Research at SMHS, suggests that a potential HIV vaccine may not be too far off.

Nixon's research, which he conducted with colleagues across the nation and in Brazil, found that some individuals who have been exposed to HIV-1, but who remain uninfected, have a certain pattern of virus-specific immune responses different from those of infected individuals.

The research, "Cellular Immune Correlates Analysis of an HIV-1 Pre-Exposure Prophylaxis Trial," appeared in the *Proceedings of the National Academy of Sciences* in July 2015.

The researchers looked at data from the pre-exposure prophylaxis initiative (iPrEx) trial, the first randomized control trial of pre-exposure chemoprophylaxis in humans. The remaining specimens from the study were used to test for naturally acquired or induced immunity to HIV-1 infection; those who became infected typically lacked responses to two HIV-1 proteins. The finding suggests that such immune responses may play a role in blocking systemic infection after exposure to the virus.

"Research has shown that T-cell responses can be observed in virally exposed but uninfected persons," said Nixon. "The question that has remained unanswered is whether or not these T-cell responses could be protecting people from acquiring systemic HIV infection. The rigor of the placebo-controlled iPrEx trial gave us access to the necessary data and specimens to address that question. **What we found was what people have been looking for, for a long time – a correlation between future infection risk and a measureable immune response.**"



## A Novel Therapy

In an effort to improve treatment for catecholamine-resistant hypotension (CRH), a life-threatening condition that occurs when blood pressure drops to dangerously low levels, researchers at SMHS have joined with La Jolla Pharmaceutical Company. 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 agreement between La Jolla and GW provides intellectual property rights for the use of angiotensin II for the therapeutic treatment of patients with hypotension and shock.

The initial 20-person clinical trial was conducted at GW Hospital in 2014 and funded through a seed grant from SMHS.

## NEW RESEARCH AWARDS

2013

\$16,226,972

26 NEW AWARDS

2014

\$23,007,314

45 NEW AWARDS

2015

\$24,090,994

52 NEW AWARDS





## The Power of Drug Therapies

**T**reatments for multiple sclerosis (MS) may soon be expanded, thanks to the discovery of two new drugs, miconazole and clobetasol.

Robert Miller, Ph.D., professor of anatomy and regenerative biology at SMHS, working with co-author Paul Tesar, Ph.D., of Case Western Reserve University, determined that **miconazole and clobetasol, when delivered in vivo at the peak of the disease, showed a reversal in the severity of MS.**

“Current therapies focus on stopping immune system attacks, slowing the progression of the disease. Our research is focused on trying to repair the brain itself, to stop the disease rather than slow it,” said Miller, who is also senior associate dean for research and Vivian Gill Distinguished Research Professor at SMHS. “While [it was] successful in vivo, we’re looking forward to continuing our research through further testing of miconazole and clobetasol, taking the next steps to finding treatments for MS.”

Miconazole, Miller and Tesar found, effectively functioned as a remyelinating drug that didn’t affect the immune system; remyelination through oligodendrocytes, which create the myelin sheath, a type of insulation coating the nerves, is crucial for preventing neural degeneration. Meanwhile, the researchers discovered clobetasol to be a powerful immunosuppressant that also worked as a remyelinating agent.

The study, “Drug-Based Modulation of Endogenous Stem Cells Promotes Functional Remyelination in Vivo,” appeared in the June 2015 edition of *Nature*.

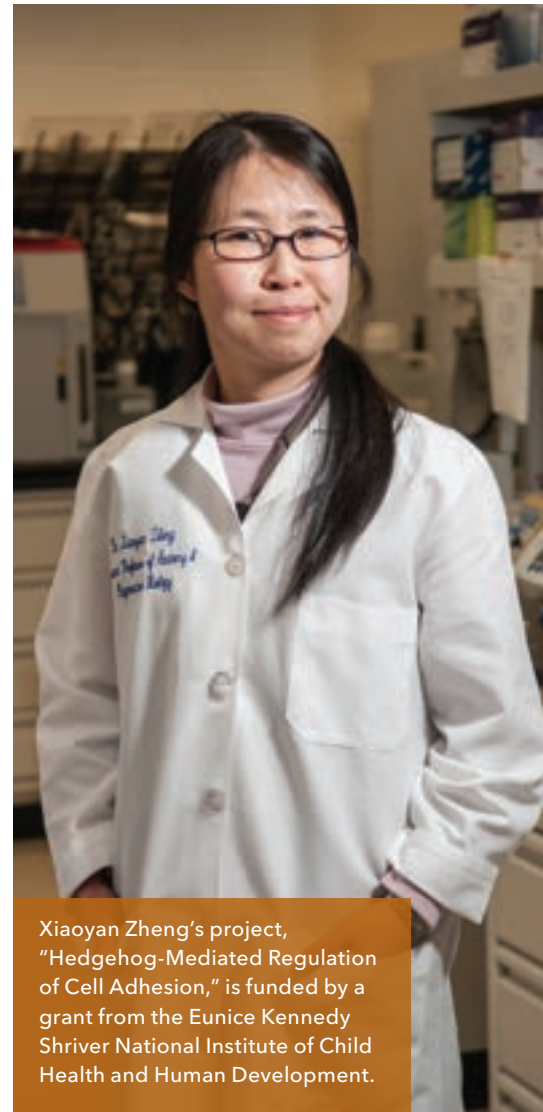
## The Hedgehog Pathway

**I**t’s a curious name for a cellular pathway — Hedgehog — but for Xiaoyan Zheng, Ph.D., assistant professor of anatomy and regenerative biology at SMHS, the cutely named pathway is a crucial element in solving diseases such as cancer.

The Hedgehog pathway, which transmits critical information to embryonic cells to direct their proper development and regeneration, derives its name from 1980-era studies focusing on gene mutations in fruit flies. Scientists, anticipating that the larvae would display the typical pattern of alternating bald and hairlike strips, found that the Hedgehog pathway in the mutant larvae looked like the creature itself: short and stubby with denticles, or pointed projections. The Hedgehog pathway, as it’s termed now, is a key regulator present in all bilateral animals, and varying concentrations of its signaling proteins appear in different parts of the embryo.

**Malfunctions of the pathway, however, can lead to cancer – that’s where Zheng and her research come in.**

“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 said. “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.”



Xiaoyan Zheng’s project, “Hedgehog-Mediated Regulation of Cell Adhesion,” is funded by a grant from the Eunice Kennedy Shriver National Institute of Child Health and Human Development.

## Investigating a Cure

Researchers' efforts toward the eradication of AIDS have recently received a boost, thanks to a five-year, \$7.5 million grant from the National Institutes of Health (NIH). **The grant will fund the District of Columbia's Center for AIDS Research (CFAR)**, a prestigious designation given to only a handful of centers in the United States.

An interdisciplinary, citywide consortium of nearly 200 researchers from three GW schools — SMHS, the Milken Institute School of Public Health (Milken Institute SPH), and the Columbian College of Arts and Sciences — and major Washington,

D.C. research institutions Georgetown University, Howard University, American University, Children's National Health System, and the Veterans Affairs Medical Center will aim to advance HIV research in the District, with a focus on preventing the spread of HIV and finding a cure. Leading the consortium is Alan E. Greenberg, M.D. '82, M.P.H., professor and chair of the Department of Epidemiology and Biostatistics at the Milken Institute SPH. Gary Simon, M.D., Ph.D., Walter G. Ross Professor of Medicine and director of the Division of Infectious Diseases at SMHS, who diagnosed the first AIDS patient in the District in 1981, serves as co-director of the DC CFAR.

The NIH CFAR program, created in 1988, emphasizes interdisciplinary and translational collaborations between basic, clinical, prevention, and behavioral researchers, with an emphasis on the inclusion of women and minority investigators.

The World Health Organization classifies an HIV infection rate of 1 percent or more as an epidemic. In Washington, D.C., however, the prevalence of HIV infection is 3 percent, a level comparable with many countries in sub-Saharan Africa, the region with the highest HIV prevalence in the world.

Although improvements in antiretroviral therapy have prolonged the lives of HIV patients, GW researchers are looking to have a larger impact: to contribute to the development of an effective HIV vaccine, and ultimately a cure.

*Time to End HIV*, an SMHS Department of Microbiology, Immunology and Tropical Medicine initiative, is dedicated to developing new and creative HIV eradication strategies to help stop HIV/AIDS.

## Staying Above the Curve

SMHS' health sciences programs have significantly expanded, positioning the school as an education center for new leaders in the health professions.

The expansion includes the post-baccalaureate pre-medicine program and a biomedical informatics program. Additionally, medical laboratory sciences students now have access to new laboratories at the Virginia Science and Technology Campus in Ashburn, Virginia, which will house the expanded health sciences programs.

"This is a very strategic move for the school and the future of health sciences at GW," said Joseph Bocchino, Ed.D., M.B.A., senior associate dean for health sciences at SMHS. "Consider the pressures on both the educational systems that develop health professionals and the systems that provide health care to contain costs. We are doing our part to develop new models of education that address accessibility to education for health professionals and, by preparing qualified graduates, doing our small part in making care more accessible as well."





# Improving Children's Lives

**W**ith a grant from the Eunice Kennedy Shriver National Institute of Child Health and Human Development, Chiara Manzini, Ph.D., assistant professor of pharmacology and physiology at SMHS, is concentrating on the CC2D1A gene and its impact on cases of severe intellectual disability and autism. “We are exploring the function of the gene and of the mutation that causes disease, by both using cell-based systems — analysis of neurons generated from animal models — and studying the behavior in mouse models to better understand the pathogenesis of the disease,” she explained. “This gene regulates multiple signaling mechanisms inside the cells, and we are hoping to understand these mechanisms first, then figure out ways to modulate them to have an impact on the disease.”



Chiara Manzini, Ph.D., first identified the CC2D1A gene mutation in 2006.

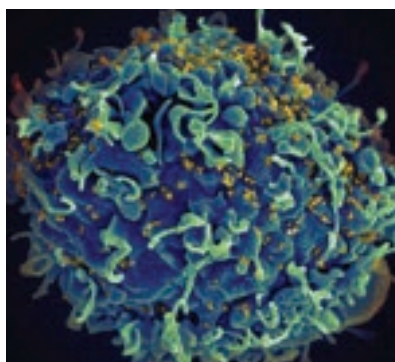
# The Heart of Improvement

**P**atient treatment is at the heart of health care reform, but many physicians find that the threat of malpractice lawsuits can affect their approaches to treatment. With one approach, known as “defensive medicine,” some doctors may order testing primarily to prevent a potential suit rather than because the test is needed. With a five-year, \$2 million grant from the National Institutes of Health, Steven Farmer, M.D., Ph.D., associate professor of medicine and associate director of the Office of Clinical Practice Innovation, is studying the effects of defensive medicine, while also assessing the impact of financial incentives on cardiovascular testing.

Farmer’s focus is on three interrelated motivations for testing: the patient benefit, financial incentives, and malpractice liability. Under the current system, Farmer reports, patients are too often receiving treatments with little benefit, and patients who should be cared for are not receiving proper treatments. The results of his study, however, could inform ongoing state malpractice and federal payment reforms, as well as emerging payment models.

# The Kick and Kill Strategy

**G**enerationCURE, made up of a group of young people dedicated to supporting amfAR’s cure-focused research, awarded its inaugural research grant to Brad Jones, Ph.D.,



assistant professor in the Department of Microbiology, Immunology, and Tropical Medicine at the GW Research Center for the Cure and Eradication of HIV, in 2015.

“If successful, our work will set the stage for clinical

testing of novel, potentially curative HIV therapeutics,” said Jones.

Jones’ research focuses on a combination therapy that can potentially eradicate the latent reservoirs of HIV that present a major barrier to uncovering a cure. Antiretroviral therapy currently can reduce active HIV to undetectable levels in the blood, but it cannot reach dormant HIV in cells, which can reactivate and replicate. In order to attack the reservoir, Jones and his team are using a strategy known as “kick and kill.” Researchers who have used this strategy have been challenged by the inability of their patients’ cytotoxic T-cells (CTL) to kill the cells infected with reactivated virus. Jones’ team, however, is hoping to overcome that challenge by using a drug that increases the activity of the TLR2 protein (a TLR2 agonist). The team has found that the TLR2 agonist can reactivate, or “kick,” the latent HIV in infected cells, while boosting the ability of the patient’s CTL to kill those cells.

Leaders at the GW School of Medicine and Health Sciences (SMHS) are committed to achievement.

# Transforming Cancer Care



Eduardo Sotomayor, M.D., is bringing all of GW's cancer enterprises under one umbrella.

**A**s inaugural director of the GW Cancer Center (GWCC), Eduardo Sotomayor, M.D., is determined to make GWCC the premier destination for all cancer-related activities in Washington, D.C. Among his priorities are attaining the National Cancer Institute (NCI) designation, advancing research, and building transdisciplinary

programs to serve as components for grant funding.

“What attracted me the most to GW was the unique opportunity to create a dynamic and innovative cancer center that, because of its location in the nation’s capital, can influence cancer research innovation, as well as cancer policy,” said Sotomayor. “This unique plat-

form, together with the strong commitment and investment from the senior leaders of SMHS, the GW Hospital, and the GW Medical Faculty Associates, is clearly a recipe for success.”

Sotomayor, who also serves as GWCC’s chief academic and clinical leader and professor of medicine at SMHS, said

the center will incorporate personalized cancer care and encompass various facets of cancer care, from basic, translational, and clinical research to policy (“It’s my pet project,” he confided) and advancements in treatment. He plans to recruit talent from both inside and outside GW, creating a powerful task force for cancer.

A renowned expert in lymphoma research and treatment, **Sotomayor specializes in immunobiology and immunotherapy of B-cell malignancies, with an emphasis on the design of novel immunotherapeutic approaches.** Sotomayor previously served as the scientific director of the DeBartolo Family Personalized Medicine Institute, the Susan and John Sykes Endowed Chair of Hematologic Malignancies, and the chair of the Department of Malignant Hematology, all at the Moffitt Cancer Center and Research Institute in Tampa, Florida.



# The Wright Kind of Leadership

"WE ARE SO PROUD OF THE QUALITY OF EDUCATION THAT OUR LEADERS PROVIDE," SAID JEFFREY S. AKMAN, M.D. '81, RESD '85, VICE PRESIDENT FOR HEALTH AFFAIRS, WALTER A. BLOEDORN PROFESSOR OF ADMINISTRATIVE MEDICINE, AND DEAN OF SMHS. "THEIR ACCOMPLISHMENTS NOT ONLY ENRICH OUR STUDENTS' LEARNING, BUT ALSO HAVE A DIRECT IMPACT ON THE COMMUNITY."




Karen Wright, Ph.D., PA-C

SMHS appointed Karen Wright, Ph.D., PA-C, as the interim chair and program director of the Department of Physician Assistant (PA) Studies.

Wright, who has more than 28 years of experience in health care, has dedicated her career to the education and development of future generations of PAs. A leader at SMHS since 2008, she has served as the director of research, program evaluation, and admissions. She also took on the role of associate program director during the reaccreditation process. GW's PA program, one of the highest-ranked programs in the United States, earned reaccreditation for a full term of seven years in 2013.

# A Commitment to the Future

 **1,119\***  
Total Full-Time Faculty

 **2,158\***  
Total Part-Time Faculty

 **233**  
Professors

 **199**  
Associate Professors

 **541**  
Assistant Professors

\*Professor, Associate Professor, Assistant Professor, Instructor, and other ranks

Richard J. Simons, M.D., an internationally recognized leader in academic medicine, serves as the senior associate dean for M.D. programs at SMHS, joining the school at the start of the 2014-15 academic year. Simons provides leadership for the development, implementation, and evaluation of the school's undergraduate and graduate medical education programs.

Simons, who also serves as a professor in the Department of Medicine, supervises the M.D. admissions office, the financial aid office, student affairs, and curricular affairs. Additionally, he provides oversight for several SMHS offices and centers and works in partnership with the GW Medical Faculty Associates, GW Hospital, and Children's National Health System. Simons rounds out his responsibilities by prioritizing collaborative scholarship and innovative educational excellence to prepare medical school, residency, and fellowship graduates for clinical practice and medical research.



Richard J. Simons, M.D.



Edward Seto, Ph.D.

## Strength in Basic Science

The GW Cancer Center (GWCC) has welcomed a new leader to its ranks: Edward Seto, Ph.D., an internationally recognized scientist and leader in cancer epigenetics. Seto serves as the associate director for basic sciences at GWCC, which incorporates all cancer-related activities at the university, SMHS, and the GW Medical Faculty Associates. Seto also serves as professor of biochemistry and molecular medicine at SMHS.

“I am thrilled that a basic scientist and a leader of the stature of Ed Seto has joined the GW Cancer Center team. He is the kind of scientist every major cancer center would love to have,” said Eduardo M. Sotomayor, M.D., director of GWCC and professor of medicine at SMHS. “Ed and I, along with the senior leaders of GW,

the GW Medical Faculty Associates, and GW Hospital, shared the same vision that strength in basic science is fundamental for the building of an innovative cancer research enterprise.”

At GWCC, Seto provides leadership for the development, implementation, and evaluation of basic science-related programs and initiatives. He also collaborates with other

**“HE IS THE KIND OF SCIENTIST EVERY MAJOR CANCER CENTER WOULD LOVE TO HAVE.”**

leaders to identify potential science programs, and he works with associate cancer center directors, including those in clinical investigations, population science, administration, and education, to promote the integration of all programs.

## Helping Students Thrive

Katherine Chretien, M.D., associate professor of medicine at SMHS, joined the dean’s executive leadership team as assistant dean for student affairs. She aids in the development and operation of an accredited undergraduate medical program while providing leadership in career counseling. Her role also includes developing and maintaining an effective system for access to health services; providing leadership in programs and policies designed to foster student success; and preparing the Medical Student Performance Evaluation for senior medical students.



Katherine Chretien, M.D.

“I look forward to helping students achieve their goals, maintain life balance, and thrive during medical school as they develop into competent, compassionate, and trustworthy professionals,” Chretien said.

Chretien, who has authored numerous publications in the field of medical education and professional development, also participates in the student admissions process.



# The Epitome of a Physician-Educator

At her formal installation as the Frank N. Miller, M.D., Distinguished Teaching Professor, Patricia Latham, M.D., Ed.D. '15, professor of pathology and of medicine at SMHS, accepted the endowed professorship and accompanying silver medal with a smile.

"I'm humbled to receive this honor because I recognize that at GW, there are many excellent physician-educators who would be deserving of this award," she said. "I'm honored."

Latham recalled her experiences working with Frank N. Miller, M.D. '48, RESD '50, B.S. '43, pointing out his love for Shakespeare, including the diseases the Bard might have encountered, and his dedication to education. Miller, who played a pivotal role in the university for more than 40 years as teacher, dean of students and curricular affairs, and chair of the Department of Pathology, increased female enrollment in the medical school and counted numerous awards among his accomplishments, including the first Golden Apple Award, given for excellence in teaching.

As Latham explained in her lecture following the installation, Miller was a gifted teacher, one who epitomized the "physician-educator." Medical education has slowly evolved since the release of the Flexner Report in 1910, and so has the role of physicians. They often assume the part of teacher or guide, and their use of educational tools has changed as the pedagogy has widened to



Patricia Latham, M.D., Ed.D. '15

adult-specific techniques, said Latham, who graduated from the Master Teacher Leadership Development Program (MTLDP) at SMHS. The MTLDP, an educational program open to SMHS faculty, is designed to enhance faculty development by focusing on teaching skills, educational leadership potential, and scholarship in education.

Along with physician-educators, the role of technology has developed, and the SMHS pathology department has shifted its approach. Students learn from visual slides, not microscopes, and small group exercises are case-based. Teaching material is digitized, and students receive iPads containing course information. "It's a wonderful boon to education," Latham said of the new technology.



**1,227** educational sessions  
Himmelfarb librarians presented to **16,207** attendees



**104,441** views of the Health Sciences Research Commons, highlighting GW (SMHS, School of Nursing, Milken Institute SPH) scholarship and research.



**Himmelfarb Library Collection**  
**3,031** textbooks  
**3,926** journals  
**100** databases  
**400** DVD/CD titles

## Heading the Team

**R**aj Rao, M.D., has been appointed as the chair of the Department of Orthopedic Surgery at SMHS, GW Hospital, and the GW Medical Faculty Associates (MFA).

“Dr. Rao is an academically accomplished, nationally respected orthopedic surgeon, making him the right person to chair the Department of Orthopedic Surgery,” said Jeffrey S. Akman, M.D. ’81, RESD ’85, vice president for health affairs, Walter A. Bloedorn Professor of Administrative Medicine, and dean of SMHS.

In his role, Rao, who also serves as professor of orthopedic surgery at SMHS, is positioning the department for clinical and research growth. Currently, the GW Department of Orthopedic Surgery has one of the best reputations in the Washington, D.C. area, and Rao is building on this momentum through the expansion of the department’s regional presence and the use of new clinical facilities at the MFA.



Raj Rao, M.D.



Mark Batshaw, M.D.

## Assuming Leadership

**M**ark Batshaw, M.D., associate dean for academic affairs and professor of pediatrics at SMHS, has accepted a new leadership position as president-elect of the American Pediatric Society. After serving as vice president/president-elect for one year, Batshaw will assume the role of president in May 2016.

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





## Science: A Matter of Resolve

**R**obert H. Miller, Ph.D., senior associate dean for research and professor of anatomy and regenerative biology at SMHS, describes “learning how to do science” as a matter of pragmatism and determination.

“It’s not rocket science,” Miller explained. “[Becoming a scientist] is asking important questions that are practical and designing experiments that give you unambiguous answers. If you can do that, you can do science. But it’s very hard to do that.”



Robert H. Miller, Ph.D.

Miller’s words came during his formal installation as the Vivian Gill Distinguished Research Professor in May 2015. The professorship was created in 1967 by a gift from Thomas H. Gill in memory of his wife, Vivian. Miller joined past distinguished Gill professors David Reiss, M.D., Professor Emeritus of Psychiatry and Behavioral Sciences and former professor of medicine at SMHS, and former professor of psychology at the Columbian College of Arts and Sciences; and Steven R. Patierno, Ph.D., former director of the GW Cancer Institute and adjunct professor of pharmacology and physiology at SMHS.

## Curriculum and Clinical Education

**C**urriculum will get a boost, thanks to Terry Kind, M.D., M.P.H., associate professor of pediatrics and SMHS’ new assistant dean for clinical education.

Kind, in her new role, focuses on the M.D. program curriculum’s clinical component. With the Office of Medical Education, the Committee on Undergraduate Medical Education Curriculum, and its subcommittees, she ensures the curriculum maintains its on-trend path and continues to fulfill its requirements: meeting accreditation criteria and preparing students for clinical practice. She also makes sure the curriculum is properly integrated, evaluated, and improved.

**“Let’s help our students apply their knowledge and develop their clinical skills**



Terry Kind, M.D., M.P.H

**and reasoning to grow into professionals who provide care with excellence and compassion,” Kind said.**

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

# Educational Excellence

200+

SMHS faculty and staff – in addition to the members of the M.D. program classes of 2017, 2018, and 2019 – who participated in Cultural Competence and Unconscious Bias training hosted by the Office of Diversity and Inclusion.

12

METEOR (Mentored Experience To Expand Opportunities in Research) Fellows

The 4-year-old competitive fellowship program encourages and supports highly qualified, under-represented-in-medicine students who are interested in academic research careers.

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participants of the four-week Summer Prematriculation Program launched in 2013 to help incoming underrepresented or disadvantaged M.D. program students make the academic, social, and environmental adjustment to medical school.

## Providing Program Support

Longtime health sciences leader Margaret M. Plack, Ed.D., DPT, PT, served as interim chair of the SMHS Department of Clinical Research and Leadership, where she oversaw and provided support for the department's 12 programs.

Plack, who joined the SMHS faculty in 2004, has served as the director of the physical therapy program, chair of the Department of Health Care Sciences, and interim senior associate dean for the health sciences. She is a professor in the Doctor of Physical Therapy program.

Leslie F. Davidson, Ph.D., OT/L, FAOTA, recently was named chair of the department that serves as home to more than 60 faculty members and supports the educational pursuits of approximately 600 students – most of whom are distance education students. Davidson joined the school from Shenandoah University, where she served as the director and associate professor of the Division of Occupational Therapy.

Ellen Goldman, Ed.D. '05, M.B.A., associate professor of human and organizational learning at GW's Graduate School of Education and Human Development, has crossed school lines, adding the role of assistant dean for faculty and curriculum development in medical education for SMHS to her responsibilities.

"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, vice president for health affairs at GW, Walter A. Bloedorn Professor of Administrative Medicine, and dean of SMHS.

Goldman, the 2014 Morton A. Bender Teaching Award winner, focuses on leadership development inside and outside the classroom. She also leads master's- and doctoral-level classes and supervises dissertation research.



Students get hands-on training in the PT lab.



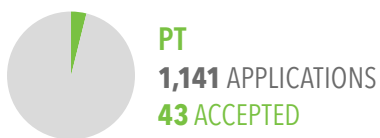
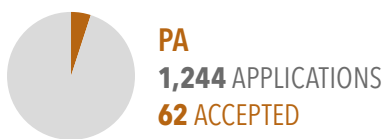
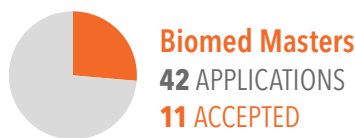
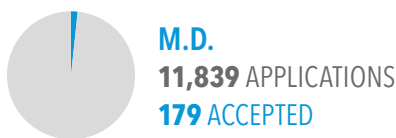
# ELATED Faculty

Joyce Maring, Ed.D., D.P.T., P.T., program director for the Doctor of Physical Therapy Program, chair of the Department of Physical Therapy and Health Care Sciences, and associate professor of physical therapy and health care sciences at SMHS, joins an elite group of 31 academic women leaders in the fields of science, technology, engineering, and mathematics, who are participating in Drexel University's Executive Leadership in Academic Technology and Engineering (ELATE) Fellowship Program.

ELATE at Drexel is a collaborative project of Drexel University and Drexel University College of Medicine. The intensive one-year, part-time program focuses on increasing personal and professional leadership effectiveness, leading and managing change initiatives within institutions, using strategic finance and resource management to enhance

organizational missions, and creating a network of exceptional women who bring organizational perspectives and deep personal capacity to the institutions and society they serve.

Maring was nominated for the fellowship by Jeffrey S. Akman, M.D. '81, RESD '85, vice president for health affairs, Walter A. Bloedorn Professor of Administrative Medicine, and dean of SMHS. She began the year-long program in May 2015 with online assignments and community building activities, and throughout her fellowship Maring is being mentored by Joseph Bocchino, Ed.D., M.B.A., senior associate dean for the health sciences. As part of the program, fellows participate in three week-long in-residence sessions, where students enhance their knowledge and skills in business practices of higher education, project management with diverse stakeholders, and effective communication in a variety of leadership platforms.



# Rising to the Top

Denice Cora-Bramble, M.D., M.B.A., B.S. '76, FAAP, has accepted two new leadership positions: executive vice president and chief medical officer for Ambulatory and Community Health Services and senior vice president for the Goldberg Center for Community Pediatric Health at Children's National Health System (Children's National).

## CORA-BRAMBLE HAS LONG HELD LEADERSHIP ROLES AT BOTH GW AND THE U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES.

Cora-Bramble now leads all of the regional ambulatory clinical operations; guides physicians, nurses, and administrative staff members; and oversees a \$113 million budget. She also heads the strategic alliance and vaccine group purchasing contracts, among others, with the Children's National Health Network and the physician business enterprise at Children's National.

Cora-Bramble has long held leadership roles at both GW and the U.S. Department of Health and Human Services. She is a professor of pediatrics at SMHS and a diplomate of the American Board of Pediatrics. Her awards include the 2009 Distinguished Alumnus Award from Johns Hopkins University and the 2009 Health Care Delivery Award from the American Pediatric Association. In 2007, she received the highest national honor in community pediatric education, the Academic Pediatric Association and American Academy of Pediatrics' National Pediatric Community Teaching Award.

# Award-Winning Educator

Juliet Lee, M.D., assistant professor of surgery at SMHS, received the 2015 Morton A. Bender Teaching Award.

Lee, a fellow of the American College of Surgeons and a board-certified surgeon, was recognized for her high academic standards, use of teaching techniques and tools, and commitment to student learning, among other attributes.

The Bender Teaching Awards recognize undergraduate, graduate, and professional teaching at GW.

Donors play a critical role in the success of the GW School of Medicine and Health Sciences (SMHS). Not only do they provide support for research, faculty, and students, but they also directly contribute to higher-quality learning.

# Developing a Stronger Health Care Future

**W**hen GW launched *Making History: The Campaign for GW* on June 20, 2014, SMHS embarked on an historic initiative to advance its ability to improve society. **This capital campaign aims to raise \$1 billion by June 2018, of which SMHS will raise \$225 million.** In the 2015 fiscal year, the school made significant strides toward realizing this goal.

## SCHOLARSHIP

Among the highest fundraising priorities at SMHS is expanding the body of scholarship support. Endowed scholarships provide a vital source of continual aid, allowing the school to offer the extraordinary benefit of a GW education to deserving students who might not otherwise be able to attend SMHS, and philanthropy makes this possible. Annual scholarships benefit students during the year in which they are gifted. For example, one of the signature programs, the Adopt-A-Doc Scholarship, provides SMHS alumni and friends the oppor-

tunity to support a medical student throughout the student's four years of medical school, creating a lasting connection between the donor and scholarship recipient. Additionally, gifts to the White Coat Initiative help sponsor many student activities. SMHS hopes to continue this momentum to expand opportunities for students and reduce their burden of student debt.

## SCHOOL INITIATIVES

An important goal for the development office is to align fundraising with the strategic priorities and goals of the school. **Philanthropy is a key driver of the school's top initiatives, such as the new GW Cancer Center and kidney transplant program.** Philanthropy is also important to expanding other areas of strength, such as neuroscience, immunology, and HIV/AIDS. SMHS seeks to endow more professorships, which recognize academic excellence among the faculty and allow the school to recruit

and retain the best talent. SMHS also endeavors to upgrade the facilities, which in turn enhances the quality of the experience of students.

Unrestricted giving is also an important category of support for the school. It equips SMHS leadership with resources to address the school's greatest needs, and helps to fund important programs.

## MAKING CONNECTIONS

***Making History* is not only about raising funds, but is also about expanding the network of the SMHS community.** Throughout the year, school representatives convey this message to alumni and friends through programs hosted across the country. Here in Foggy Bottom, patients heard compelling discussions by physicians and scientists. The 2015 Alumni Weekend brought alumni and their guests back to campus, where they attended informative lectures, enjoyed tours of Ross Hall, and connected with students.

The greatest institutions, including medical and health sciences schools, exhibit a strong sense of loyalty among their communities of alumni and friends. To that end, SMHS is grateful for the leadership of Stuart Kassin, M.D. '72, FACP, MACR, and Lara Oboler, M.D. '95, the co-chairs of the SMHS Dean's Council, who, with Jay Katzen, M.D. '72, B.A. '67, co-chair the SMHS Making History campaign. These outstanding alumni and members of the Dean's Council are accelerating the school's effort to engage alumni to work together to advance the school.

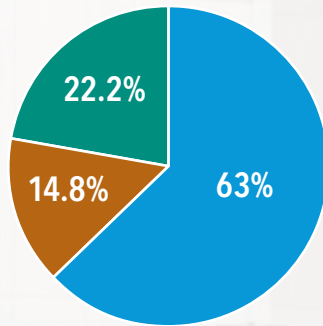


# FISCAL YEAR 2015 SMHS DEVELOPMENT AND ALUMNI RELATIONS BY THE NUMBERS

## \$18.4

**AMOUNT RECEIVED  
(IN MILLIONS)**

SOURCE: GW'S ADVANCE DATABASE



## TOTAL ENDOWMENT

**\$239 MILLION** PRODUCING **\$12.1 MILLION** IN INCOME FOR THE VARIOUS PROGRAMS.

### UNIVERSITY ENDOWMENT:

UNIVERSITY - 63%

SMHS - 14.8%

ALL OTHER SCHOOLS - 22.2%

SOURCE: GW OFFICE OF THE COMPTROLLER, FINANCE DIVISION



## FY15 ATTAINMENT BY DONOR TYPE

GW ALUMNI - \$5.1 MILLION

CORPORATIONS - \$1.9 MILLION

FOUNDATIONS - \$7 MILLION

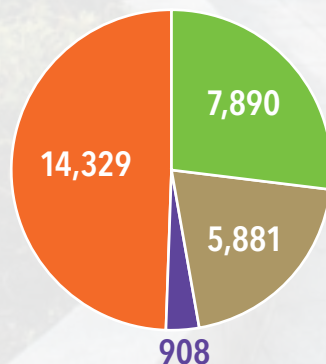
FRIENDS - \$2.4 MILLION

OTHER ORGANIZATIONS - \$1.4 MILLION

OTHER INDIVIDUALS - \$0.6 MILLION

SOURCE: GW'S ADVANCE DATABASE

NOTE: SOME INDIVIDUAL DONORS CONTRIBUTED THROUGH FAMILY FOUNDATIONS AND DONOR-ADVISED FUNDS.



## 29,008 TOTAL ALUMNI

M.D. ALUMNI - 7,890

RESIDENT ALUMNI - 5,881

BOTH M.D. AND RESIDENT ALUMNI - 908

HEALTH SCIENCES ALUMNI - 14,329

SOURCE: GW'S ADVANCE DATABASE

# 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, SMHS; Director, Allergy and Sinus Center, GW  
Medical Faculty Associates

**THOMAS E. FLYNN, M.D. '86**  
Ophthalmology; Owner, Ellsworth, Uvetis, & Retina Care

**JEANNE G. HOLZGREFE, M.D. '96, Ph.D., M.P.H.**  
Psychiatry; Chevy Chase Psychiatric Services; Assistant Clinical  
Professor of Psychiatry and Behavioral Sciences, SMHS

**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

**JOHN C. PAN, M.D. '70, RESD '74\***  
OB/GYN; Founder, Center for Integrative Medicine, SMHS



Top Row (L-R) Jeanne G. Holzgreffe, M.D. '96, Ph.D., M.P.H.; Thomas E. Flynn, M.D. '86; Jeffrey S. Akman, M.D. '81, RESD '85; Rakesh C. Sahni, M.D.; Floyd Alexander Katske, M.D. '76, RESD '77

Bottom Row (L-R) Jay E. Katzen, M.D. '72, B.A. '67; Richard G. Popiel, M.D. '81, RESD '83, M.B.A., B.S. '75; Lara S. Oboler, M.D. '95, Co-Chair; Stuart S. Kassan, M.D. '72, FACP, MACR, Co-Chair; Kerry L. Kuhn, M.D. '73, RESD '77, B.A. '70, FACOG; Smita H. Patel, M.D., DFAPA

**SMITA H. PATEL, M.D., DFAPA**  
Psychiatry; Assistant Clinical Professor of Psychiatry and  
Behavioral Sciences, SMHS; Private Practice

**RICHARD G. POPIEL, M.D. '81, RESD '83, M.B.A., B.S. '75**  
Internal Medicine; Executive Vice President, Healthcare Services  
and Chief Medical Officer, Cambia Health Solutions and 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 and 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, SMHS

**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.*

\*Not Pictured



SMHS has established, and continues to explore, new avenues for student support.

## Adopt-a-Doc

**D**aegu, South Korea, native Jiyong Lee, M.D. '15, didn't expect to receive a scholarship before attending SMHS; as an international student, he wasn't even eligible for federal loans. His first year at GW, however, he and Allison Hoff, M.D. '15, became the first recipients of the then nascent scholarship program "Adopt-a-Doc."

**SINCE ITS INCEPTION, ADOPT-A-DOC HAS GROWN TO INCLUDE NEARLY TWO DOZEN SCHOLARSHIPS.**

Adopt-a-Doc began with a gift from Russell Libby, M.D. '79, assistant clinical professor of pediatrics at SMHS, who donated funds in memory of his mother, Leona Libby Feldman. The idea of the gift — a minimum of \$20,000 to be spread equally over a four-year period — was to make both an immediate and lasting impact on students' debt burden, including on the accumulation of compounding interest, while ensuring donors knew the student who was benefiting.

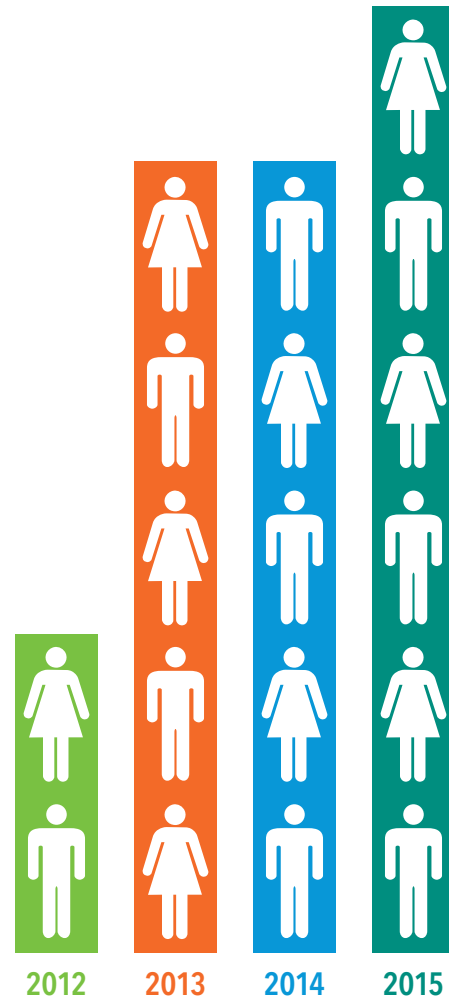
Sandra Caskie, M.D. '82, also pledged a gift in memory of a loved one: her former

classmate and close friend, Henrietta Leonard, M.D. '82, RESD '85, a Rhode Island-based psychiatrist who died in 2007. Caskie's gift went to Lee, Libby's to Hoff.

For Lee, the gift was invaluable, allowing him to focus on primary care medicine, a field typically less lucrative than others. "The second I got a call from Dr. Caskie, I had less of a burden than other people, and I could pursue a career in primary care, which I really wanted to do," said Lee. "This scholarship provided me room financially, and Dr. Caskie encouraged me to pursue my career in primary care."

Since its inception, Adopt-a-Doc has grown to include nearly two dozen scholarships. One contributor, Tom Flynn, M.D. '86, is supporting five medical students, and the SMHS Class of '87 banded together to provide support to a member of the next generation of physicians.

To learn more about becoming involved in the program, contact Sumana Chatterjee, director of development, at [schatter@gwu.edu](mailto:schatter@gwu.edu) or (202) 994-6724, or visit [smhs.gwu.edu/give/power-of-giving/adopt-a-doc-scholarship](http://smhs.gwu.edu/give/power-of-giving/adopt-a-doc-scholarship).



**18** ADOPT-A-DOC SCHOLARS SINCE THE START OF THE PROGRAM IN 2012

## White Coat Initiative

The white coat, though simple in design, is an iconic symbol for those in health care; when they don their coats for the first time — a passage treated with ceremony and respect — medical and health sciences students are reminded of their commitment to, and passion for, healing. Putting on the coat also signifies the start of a career and the responsibility and trust that decision entails.

In recognition of that milestone, the White Coat Initiative, which started in 2001, allows SMHS alumni to forge relationships with students entering the field, acting as a welcome to the professional community. For medical students, alumni's financial support provides for white coats, supplies used during Community Service Day, and educational technology and software, in addition to other activities. The White Coat Initiative was extended two years ago to physician assistant students, who receive their long white coats at a pre-graduation ceremony.

For more information on the M.D. White Coat Initiative, please contact Lisa Harter at [lwharter@gwu.edu](mailto:lwharter@gwu.edu).

For more information on the PA White Coat Initiative, as well as for information on options for physical therapy and other health sciences students, please contact Sarah Klein at [smklein@gwu.edu](mailto:smklein@gwu.edu).



## Endowed Scholarships

Each year, SMHS provides more than \$5 million in support; close to 75 percent of students receive funds. Of those, around half receive private philanthropic aid. Endowed scholarships — which total close to 80 — offer considerable funding opportunities for students. Some provide general support for students in medicine and the health sciences, whereas others are more tailored to the interests of the donors. The Ella F. Andrews, the Anna Bartsch, and the Hazel Mae Bayne, M.A. '30, B.A. '25, scholarship funds, for

example, provide assistance to female students; the Henry and Mary Amster and Louise Greenburg Amster Scholarship Endowment in Medicine, on the other hand, awards funding to those with an interest, knowledge, and commitment to the Jewish community. Additional scholarships target students specializing in specific fields, such as radiology or health care delivery, and the Eugene B. Casey Scholarship Fund provides four years of full tuition, room, and board.

# 274

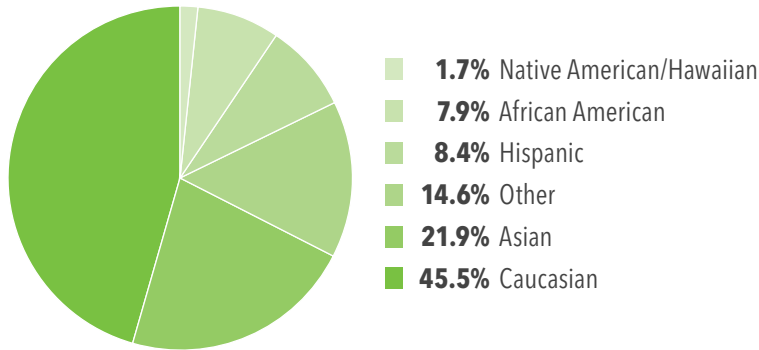
endowment funds supported SMHS students, faculty, programs, lectures, and other activities.



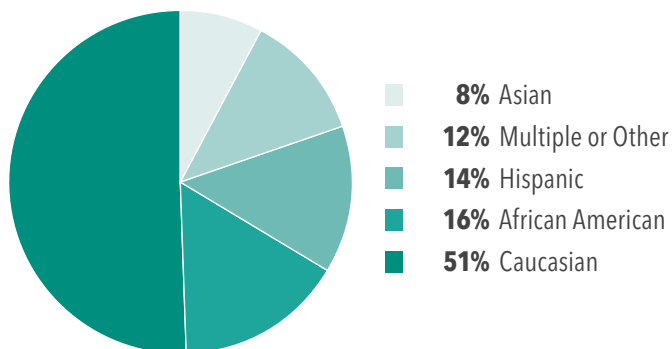
## HEALTH SCIENCES PROGRAMS ENROLLMENT SUMMER 2014, FALL 2014, SPRING 2015

### M.D. PROGRAM ENROLLMENT 2015

711 



### HEALTH SCIENCES PROGRAMS



#### ASSOCIATE IN SCIENCE

**224** Health Science Laboratory Technology  
**19** Health Sciences

#### B.S. IN HEALTH SCIENCES

**135** Clinical Health Sciences  
**24** Clinical Management & Leadership  
**38** Clinical Research Administration  
**14** Cytotechnology  
**38** Emergency Medical Services Management  
**16** Health Intervention & Disaster Response  
**109** Medical Laboratory Sciences  
**6** Pharmaceutical Sciences

#### POST-BAC UNDERGRADUATE CERTIFICATE

**75** Medical Laboratory Sciences  
**5** Medical Laboratory Sciences: Blood Banking  
**2** Medical Laboratory Sciences: Chemistry  
**1** Medical Laboratory Sciences: Hematology  
**15** Medical Laboratory Sciences: Microbiology

#### GRADUATE CERTIFICATE

**5** Clinical Research Administration  
**1** Clinical Research Practice  
**3** Clinical & Translational Research  
**6** Health Care Quality  
**3** Regulatory Affairs

#### M.S. IN HEALTH SCIENCES

**43** Clinical Management & Leadership  
**2** Clinical Microbiology  
**111** Clinical Research Administration  
**33** Clinical & Translational Research  
**26** Emergency Medical Services Leadership  
**73** Health Care Quality  
**20** Immunohematology  
**1** Immunohematology & Biotechnology  
**5** Medical Laboratory Sciences  
**6** Molecular Diagnostic Science  
**150** Physician Assistant  
**46** Regulatory Affairs  
**2** Translational Microbiology

#### DOCTORAL

**5** Occupational Therapy  
**117** Physical Therapy

## LEADERSHIP

**JEFFREY S. AKMAN, M.D. '81, RESD '85**

Vice President for Health Affairs, Walter A. Bloedorn Professor of Administrative Medicine, and Dean

**HUDA M. AYAS, Ed.D. '06, M.B.A. '98, M.H.S.A. '93**

Associate Dean for International Medicine, Executive Director of the Office of International Medicine Programs

**ANNE BANNER**

Executive Director of the Office of Communications and Marketing

**MARK L. BATSHAW, M.D.**

Associate Dean for Academic Affairs, Children's National Health System

**JOSEPH BOCCHINO, Ed.D., M.B.A.**

Senior Associate Dean for Health Sciences

**VINCENT A. CHIAPPINELLI, Ph.D.**

Associate Vice President for Health Affairs, Ralph E. Loewy Professor of Basic Science, Associate Dean and Chair of the Department of Pharmacology and Physiology

**KATHERINE CHRETIEN, M.D.**

Assistant Dean for Student Affairs

**MARY A. CORCORAN, Ph.D., OT/L, FAOTA**

Associate Dean for Faculty Development for Health Sciences

**JEFFREY BERGER, M.D., M.B.A.**

Associate Dean for Graduate Medical Education

**LAWRENCE DEYTON, M.D. '85, M.S.P.H.**

Senior Associate Dean for Clinical Public Health

**SIDNEY W. FU, M.D., Ph.D.**

Senior Advisor to the Vice President for Health Affairs on China Initiatives

**RHONDA M. GOLDBERG, M.A.**

Associate Dean for Student Affairs

**CATHERINE GOLDEN, Ed.D., M.P.A.**

Assistant Dean for Academic Planning and Assessment

**ELLEN F. GOLDMAN, Ed.D., M.B.A.**

Assistant Dean for Faculty and Curricular Development in Medical Education

**YOLANDA HAYWOOD, M.D., RESD '87, B.A. '81**

Associate Dean for Diversity, Inclusion, and Student Affairs

**AMY G. HERTZ**

Senior Advisor and Chief of Staff to SMHS Dean

**LANCE B. KAPLAN, M.B.A.**

Associate Dean of Finance, Administration, and Operations

**TERRY KIND, M.D., M.P.H.**

Assistant Dean for Clinical Education

**RAY LUCAS, M.D.**

Associate Dean for Faculty Affairs and Professional Development

**DIANE MCQUAIL, M.A.**

Assistant Dean of Admissions for the M.D. Program

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## SMHS CENTERS AND INSTITUTES

Center for Injury Prevention and Control

Center for Otolaryngology Microsurgery Education and Training (COMET)

Dr. Cyrus and Myrtle Katzen Cancer Research Center

Epilepsy Center at SMHS

GW Cancer Center

GW Cancer Institute

GW Center for Integrative Medicine

GW Heart and Vascular Institute

GW Institute for Neuroscience

GW Institute for Spirituality and Health (GWish)

GW Ron and Joy Paul Kidney Center

Institute for Biomedical Sciences

McCormick Genomic and Proteomic Center

Research Center for Neglected Diseases of Poverty

Rodham Institute

Ronald Reagan Institute of Emergency Medicine

Washington Institute of Surgical Education (WISE)

## AFFILIATED CENTERS, INSTITUTES, AND INITIATIVES *(not comprehensive)*

Breast Care Center

Center on Aging, Health, and Humanities

Clinical and Translational Science Institute at Children's National (CTSI-CN)

Computational Biology Institute District of Columbia Center for AIDS Research (DC-CFAR)

Epilepsy Center at the MFA

GW Transplant Institute

Human Hookworm Vaccine Initiative

Prostate Cancer Clinic

# 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 floors are completed in 2016, the \$275 million facility, which earned LEED Gold certification as part of the University's green building strategy, will bring together approximately 140 researchers from four of GW's 10 schools – the Columbian College of Arts and Sciences, the School of Engineering and Applied Science, the School of Medicine and Health Sciences, and the Milken Institute School of Public Health.

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 featuring five rooms – specially built to dampen vibrations from the nearby Metro – housing high-resolution microscopy equipment, allowing researchers to study nanometer-sized samples in ultra-fine detail and create 3-D reconstructions of specimens.







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