SMHS Opens the Doors on a Major Update and Expansion to Its Clinical Learning and Simulation Skills Center
Leading in the New Health Care Landscape

It is no secret that we are experiencing enormous change in health care in the United States. At GW’s School of Medicine and Health Sciences (SMHS), we see this transition as an opportunity to lead. It is our responsibility to provide the highest-quality education and training for our students, residents, fellows, and faculty, so they can embrace the health care environment of the future as leaders in their fields.

As our Class of 2014 graduates and its members enter an industry that no longer reflects the health care system of years past, we know that they will be able to skillfully and confidently attend to the needs of their patients in this changing environment. Because of their hard work and dedication to helping others, we will celebrate their accomplishments during graduation ceremonies in May.

From an institutional standpoint, we’re evolving to meet the changes in the marketplace. We continue to upgrade and expand our physical space, providing our faculty members with the tools and environment to advance knowledge. We are crafting a strategic plan that will serve as a road map to continued successes in education, research, clinical care, and community service. We have made significant additions to the school’s leadership team, including the appointments of a new senior associate research dean and a senior associate dean for clinical public health. Additionally, we have appointed new chairs in the departments of psychiatry and behavioral sciences, and obstetrics and gynecology. These new leaders serve as a strong foundation for our school, our programs, and our students, and they will help guide our institution as we navigate the shift occurring across health care.

Naturally, in an atmosphere of change, we are also implementing innovative approaches to education. For our incoming M.D. students, we will present a revised curriculum with an emphasis on active learning, earlier clinical experience, enhanced professional development, and independent study time, and will integrate material to enhance learning and retention.

As medicine and health care increasingly shift to an interdisciplinary, team-based model, we have emphasized team-based learning across our programs, promoting side-by-side learning experiences with colleagues in various specialties. In our newly expanded Clinical Learning and Simulation Skills Center, we are able to re-create real-life scenarios in a safe environment, allowing students to learn the most effective methods for communication between health professionals while providing treatment.

Additionally, we are adding new educational opportunities within the health sciences — meeting the demands of our students and the health care community alike — such as developing a new integrative medicine program, expanding opportunities at GW’s Virginia Science and Technology Campus, and setting plans in motion for an occupational therapy program.

As an academic medical center, we have a responsibility to be a leader in medical education and research. As the health care market changes, we will continue to train students, residents, and fellows to be a part of a diverse and highly skilled workforce equipped to care for patients within our local, national, and global communities. As I often say, it’s an exciting time at GW SMHS — but it’s also an exciting time across the health care spectrum. I invite you to take the opportunity to get involved with our institution, as we lead during this time of great change and progress.

Sincerely,

JEFFREY S. AKMAN, M.D. ’81, RESD ’85
WALTER A. BLOEDORN PROFESSOR OF ADMINISTRATIVE MEDICINE
VICE PRESIDENT FOR HEALTH AFFAIRS
AND DEAN, SCHOOL OF MEDICINE AND HEALTH SCIENCES
SPRING 2014

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Bryan Walker, M.H.S., P.A.-C., assistant professor of health sciences, and associate director, didactic curriculum, with Physician Assistant students Thomas Lorenz, Sheila Manier, and Tammy Nguyen in the CLASS Center.

Photo by: Michael Leong, Biomedical Communications

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MAKING THE ROUNDS

A Celebration of Research

Dominic Raj, M.D., M.B.B.S., professor of medicine, biochemistry and molecular biology, and director of the Division of Renal Diseases and Hypertension, took home the 2014 Distinguished Researcher Award as faculty, residents, and students from throughout GW’s School of Medicine and Health Sciences (SMHS) participated in the Health and Medicine Research portion of GW’s 19th Annual Research Day. The two-day event – co-hosted by the Office of the Vice President for Research and the Office of the Provost – showcased research from across the university, with the second day focused exclusively on health-related research.

Earlier in the academic year, Raj, an expert in kidney disease and hypertension, received a pair of multimillion-dollar grants from the National Institutes of Health to examine the role of gut microbiome on inflammation and cardiovascular disease. Joining him as 2014 research day winners were fourth-year M.D. students Bradley Anderson, Devin Patel, Anita Sivaraman, and Sarah Todd, all of whom received the Stuart Kassan Research Fellowship Award; fourth-year M.D. student Maureen Banigan, who won the 2014 Doris Deford Speck and George Speck, M.D. Endowed Prize; and Wenge Zhu, Ph.D., assistant professor of biochemistry and molecular medicine, who received the 2013 Elaine H. Snyder Cancer Research Award. This year’s poster award winners were Robin Stiller, MSI; Lindsay Marszal, MSI; and Samantha Ahle, MSIV.

“Today we celebrate one of the three key missions of our school – education, training, and research,” said Jeffrey Akman, M.D. ’81, RESD ’85, Walter A. Bloedorn Professor of Administrative Medicine, vice president for health affairs, and dean of SMHS. “We celebrate the work of our undergraduates, our grad students, our faculty, our fellows and mentors who generate new information and new ideas, and who develop scholarship to advance our fields in health and medicine.”

Elaine Ostrander, chief and distinguished investigator at the National Institutes of Health’s National Human Genome Research Institute, presented the SMHS keynote address, titled “Genetics of Complex Traits: Understanding Breed Variation in the Domestic Dog.” Ostrander encouraged her audience to think creatively.

“When faced with a problem, don’t do the tried and true,” she said. “Think about a novel way of attacking the problem.”

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ON THE WEB
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Gaba to Lead Department of OBGYN

Despite a nationwide search, GW’s School of Medicine and Health Sciences (SMHS) leadership didn’t have to look very far to find the ideal successor to John Larsen, M.D., chair of the Department of Obstetrics and Gynecology (OBGYN), who retired after nearly four decades at GW. Nancy Gaba, M.D. ’93, RESD ’97, FACOG, a longtime leader at GW, has been selected to serve as chair. In this role, Gaba will provide strategic leadership and management of the department’s programmatic growth, educational oversight, and research development. She will also supervise all clinical activities, ensuring the highest-quality patient care and developing new services for GW’s patients. Gaba will also be installed as the Oscar I. and Mildred S. Dodek and Joan B. and Oscar I. Dodek Jr. Professor.

“Dr. Gaba is a nationally recognized academic obstetrician-gynecologist and an outstanding physician, which makes her the right person to chair the Department of Obstetrics and Gynecology,” said Jeffrey S. Akman, M.D. ’81, RESD ’85, Walter A. Bloedorn Professor of Administrative Medicine, vice president for health affairs, and dean of SMHS. “She has a proven track record of successful leadership at SMHS, and her vast experience will help her lead the department as it continues to grow. Her well-established relationships throughout the university, as well as her national stature, will help ensure her success in this role.”

Gaba graduated from GW’s M.D. program in 1993 and completed her internship and residency at GW in 1997, where she held the position of administrative chief resident. Prior to her selection as chair, Gaba served as professor and vice-chair in the Department of Obstetrics and Gynecology, and associate dean for graduate medical education (GME). Jeffrey Berger, M.D., M.B.A., associate professor of anesthesiology and critical care medicine, has been named the interim associate dean for GME (see p. 33).

“Years of dedication and service in the field of obstetrics and gynecology have led Dr. Gaba to make significant contributions to the advancement of women’s health,” said Alan Wasserman, M.D., president of the GW Medical Faculty Associates, Eugene Meyer Professor of Medicine, and chair of the Department of Medicine. Her clinical and research experience will “enable the department to meet its primary goal of providing outstanding clinical care and training highly skilled physicians.”

“It is truly an honor and a privilege to have been selected for this important role as chair of one of the largest departments at GW,” said Gaba. “I am grateful for all that GW has given me over my many years here as a student, resident, and dedicated faculty member.”

SMHS Supports Research with New Dean Appointment

In the interest of further advancing the George Washington University research mission, GW’s School of Medicine and Health Sciences (SMHS) has selected renowned neuroscientist and research administrator Robert H. Miller, Ph.D., to serve as the senior associate dean for research.

Miller will draw upon more than 30 years of experience in research and leadership as he provides support for SMHS scientists. He will lead efforts to identify research funding, assess and identify areas for research expansion, cultivate research relationships with outside entities, lead research-related faculty development, and create plans to secure the infrastructure and technology required to aid SMHS research priorities.

“The addition of Dr. Miller to the SMHS leadership team will be a tremendous asset to SMHS and our faculty members,” said Jeffrey S. Akman, M.D. ’81, RESD ’85, Walter A. Bloedorn Professor of Administrative Medicine, vice president for health
affairs, and dean of SMHS. “His successful track record of administrative oversight and management, coupled with his rigorous research expertise, make him the ideal candidate for this position. I am looking forward to working with Dr. Miller to foster existing partnerships and cultivate new relationships that will greatly benefit our research enterprise.”

Upon his arrival at GW, Miller will review school-wide policies and metrics as he develops a plan to leverage GW’s strengths, as well as identify new areas of research. He will also supervise SMHS research activities; serve as an advocate for SMHS faculty members; and foster effective interaction between the departments, the school, and the university involving grant and contract submission and management.

As the vice president for research at Case Western Reserve University, Miller was responsible for providing campus-wide leadership and strategic guidance in all areas of research. He also served as the director of the Center for Translational Neurosciences, professor in the Department of Neurosciences, and the Allen C. Holmes Professor of Neurological Diseases.

Miller is the principal investigator on multiple NIH-funded grants, and he will continue his role as an active researcher. His research has provided targeted insights into a variety of neuropathological conditions, which are currently propelling a number of clinical trials in the U.S. and Europe. Miller will maintain a laboratory in Ross Hall, where he will continue research into multiple aspects of neurological diseases including autism spectrum disorders, multiple sclerosis, brain tumors, and spinal cord injuries.

Global Leader
Huda M. Ayas, Ed.D. ’06, M.B.A. ’98, M.H.S.A. ’93, founder and executive director of the Office of International Medicine Programs (IMP), was recently named associate dean for international medicine. Ayas, who has served in a leadership capacity at SMHS for 20 years, has established and managed upward of 125 global partnerships and affiliations in more than 50 countries and has developed and implemented many international medical education and training programs.

“Dr. Ayas established and developed this office from the ground up,” said Jeffrey S. Akman, M.D. ’81, RESD ’85, Walter A. Bloedorn Professor of Administrative Medicine, vice president for health affairs, and dean of SMHS. “She has developed an international reputation as someone who is dedicated to the health and well-being of our global community through the education, training, and development of physicians and other medical professionals.”

Within IMP, Ayas and her team have established a vast array of medical education and training programs, training more than 10,000 international and GW faculty, students, and staff since 1994. Ayas also serves as the director of the global health track for M.D. students, which is designed to increase intercultural sensitivity and awareness about international health systems, as well as regional diseases, while teaching students to assess the specific health needs of countries at various stages of development.

Nixon Installed as the Walter G. Ross Professor of Basic Science Research
In his first six months as a clinical virologist at the University of Oxford, in 1988, Douglas F. Nixon, M.D., Ph.D., identified part of the Human Immunodeficiency Virus (HIV) that could stimulate a white blood cell. It was a substantial finding at the time, and the first of many for Nixon, the renowned HIV/AIDS researcher and educator who was installed as the Walter G. Ross Professor of Basic Science Research at the George Washington University School of Medicine and Health Sciences (SMHS) March 19.

“Dr. Nixon is tackling some of the world’s biggest challenges, and his exceptional work holds real promise for improving the lives of hundreds of millions of people,” said Jeffrey S. Akman, M.D. ’81, RESD ’85, Walter A. Bloedorn Professor of Administrative Medicine, vice president for health affairs, and dean of SMHS, in his opening remarks.

Nixon, who was named chair of the Department of Microbiology, Immunology, and Tropical Medicine at SMHS in October 2013, leads the school’s Research Center for Neglected Diseases of Poverty and its Center for Basic Research and Prevention of HIV/AIDS. Beyond Foggy Bottom, he also serves as chair of the National Institutes of Health (NIH) AIDS Vaccine Research Subcommittee.

Once the professorship was officially conferred, Nixon remarked that “it’s actually about all of us, because we’re here to work toward eliminating diseases that are causing suffering in
many places around the world. "No one individual is going to make this breakthrough," Nixon remarked, in closing. “We all come up with ideas. Ideas are frequent. But actually putting things into practice requires groups to work together and to set common goals. We want to cure AIDS. It’s time to end HIV.”

**Inovation through Clinical Practice**

As the health care debate rages on, policy-makers and physicians are trying to mend a system that many Americans think is overpriced and underperforming. “There is an urgency to create a health care system of quality care that is both innovative and efficient,” says Jesse Pines, M.D., M.B.A. As director of the newly established Office of Clinical Practice Innovation (OCPi) at GW’s School of Medicine and Health Sciences (SMHS), Pines brings this discussion to GW, as he and his team use their expertise in health policy and medicine to face these challenges head-on.

The new office, according to Pines, who holds a dual appointment as a professor of emergency medicine at SMHS and a professor of health policy at GW’s Milken Institute School of Public Health, focuses on two key areas: how medical care is delivered; and how specific products impact clinical care, by improving quality, enhancing value, and reducing costs. Pines’ primary goal is to prepare SMHS to “innovate clinical practice in the context of all the changes that will be rolled out with the Affordable Care Act, and also to help the school become a leader in this field by creating scholarships.”

**Apples for the Teachers**

Follies, the Broadway-like variety show featuring musical numbers, choreographed dance routines, and plenty of slapstick comedy, is an annual rite for GW’s School of Medicine and Health Sciences students looking to blow off some steam as the end of the spring semester approaches.

Midway through the songs and dances, and comedy sketches and videos, students took a moment to celebrate those professors who had made a big impact on their medical education, by presenting them with Golden Apples for their outstanding service. In addition to each class of medical students joining in the event, for the first time, physical therapy (PT) and Physician Assistant (PA) students took part in the festivities.

First-year students honored Ron Bohn, Ph.D., associate professor of anatomy and cell biology; second-year students honored David Diemert, M.D., associate professor of microbiology, immunology, and tropical medicine; third-year students selected Charles Macri, M.D., professor of obstetrics and gynecology, and fourth-year students recognized Jim Scott, M.D., professor of emergency medicine, and of health policy, bringing Scott’s Golden Apple total to 14. PT students honored Ellen Costello, Ph.D., associate director for the program in physical therapy and associate professor of physical therapy and health care sciences; and Glenn Walker, Ph.D., professor of biochemistry and molecular medicine, was presented his award by PA students.

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MAKING THE ROUNDS

MATCH MAKER

School of Medicine and Health Sciences
Class of 2014 Ready to Transition to Residency

BY LAURA OTTO

It’s hard to describe how Amy Waldner, a fourth-year medical student at GW’s School of Medicine and Health Sciences (SMHS), was feeling March 21 in the waning minutes leading up to Match Day — elated, anxious, maybe even a little sad. “You work so hard through four years of medical school, hoping that everything will work out the way you want it to on this day,” said Waldner, who hoped to join her boyfriend, a first-year anesthesiology resident, at the University of Pennsylvania (Penn).

Match Day marks what most medical students call one of the most pivotal moments in their medical education — the transition between medical school and residency.

“Match Day is a crucial milestone in the life of any physician,” explained Jeffrey S. Akman, M.D. ’81, RESD ’85, Walter A. Bloedorn Professor of Administrative Medicine, vice president for health affairs, and dean of SMHS. “It’s when medical students learn where they will be doing their residency training. Our students match with some of the leading...
medical institutions in the country, including GW, in every specialty that you can imagine.”

Students surrounded by family, friends, and faculty members gathered in Ross Hall to celebrate this milestone. As the clock struck noon, the students joined with colleagues from schools across the country as they simultaneously received and opened their envelopes from the National Residency Matching Program, a nonprofit corporation established to provide a uniform date of appointment to U.S. graduate medical education positions. SMHS students were among nearly 16,000 medical students learning where they will spend the next three to five years of their careers, fulfilling their residency requirements.

Waldner got her wish, matching in emergency medicine at Penn. “It’s a dream come true,” she said, fighting back tears with her letter in hand. “I prepared for the worst and hoped for the best.”

For Jeffrey Berger, M.D., associate professor of anesthesiology and critical care medicine at SMHS and the new interim associate dean for graduate medical education, Match Day is equally exciting. “We find out exactly who is coming to our program,” he said. “There will be some familiar faces that come from GW and some that come from outside institutions. Being chosen by top-notch students is validating of our efforts,” he added.

GW has anywhere from two to 20 residents per program at a time, explained Berger. “In the anesthesia program, we might receive more than 900 applications for eight positions,” he added. “This gives you a sense of the challenge program directors like me face. You have this crop of students who made it into medical school, who are all outstanding individuals with exceptional academic records, and you are, in a sense, trying to split hairs with a one in 100 ratio. It’s a tricky process.”

GW’s Class of 2014 matched at many of the nation’s most competitive programs, including Harvard University, Johns Hopkins Hospital, Boston University Medical Center, Baylor College of Medicine, and Northwestern University. Eleven SMHS students were picked to continue their training at GW, and five others will train at SMHS clinical partner Children’s National Health System.
Afternoon tea is a time-honored daily British tradition. It’s an opportunity to sit, sip, and chat with friends or co-workers. Growing up in Cambridge, England, Douglas F. Nixon, M.D., Ph.D., is well acquainted with the custom. During his time at the University of Oxford, where he trained as a pathologist, Nixon found that conversations over a cup of tea might lead to any number of things, including scientific advances. “If you can get people out of their office and into a space with a welcoming atmosphere, then you create an opportunity to brainstorm and form new ideas.”

As the Ross Professor of Basic Science Research and Chair of the Department of Microbiology, Immunology, and Tropical Medicine (MITM) at GW’s School of Medicine and Health Sciences (SMHS), Nixon will put this philosophy into practice as he leads the school’s two new labs: The Research Center for Neglected Diseases of Poverty and The Center for Basic Research for the Cure and Prevention of HIV/AIDS.

Touring the nearly 35,000-square-foot space that occupies the 5th and 6th floors of Walter G. Ross Hall, it is clear that it’s not a typical lab. The space features two meeting or “interaction” areas, 104 individual work stations, a microscope room, and a tropical life cycle room — where parasites are cultured.

In 2010, SMHS received a $15 million grant from the National Institutes of Health through the Recovery Act Limited Competition: Extramural Research Facilities Improvement Program to help construct the new labs.

This new lab space is state-of-the-art, according to Nixon, as much because of the science taking place in it as the way the lab is constructed.

The space is equipped with six InFocus Mondopads — wall-sized tablet PCs with 55-inch LCD touch screens, digital interactive whiteboards, and video conferencing capabilities. The screens are strategically placed to foster discussion and collaboration and will play a major role in the lab’s international work. Rather than replacing face-to-face meetings, says Nixon, they will enhance the meetings by streamlining the preparation of background materials.

This area was cleverly designed for a reason, says Nixon. “Scientists often lack opportunities to interact with fellow

SPACE FOR IDEAS

BY LAURA OTTO
scientists,” he says. “In order to generate new ideas and strengthen existing collaborations you need a space where people can meet.”

For Nixon, these meeting areas, not found in other labs, provide the opportunity to interact with people who work outside his field, as well as those within it. “I find it very valuable to talk to people who are working in different biological disciplines because I always learn something from them.”

In the lab, Nixon, whose research is funded through grants from the NIH, AmfAR (the Foundation for AIDS Research), and the Gates Foundation, is most excited to contribute to the science behind an HIV cure or vaccine. A pioneer in HIV/AIDS research, Nixon has devoted much of his time and effort to eradicating the disease. “With our existing faculty and with new recruits, I’m confident we can create an intellectual, scientific hub where GW can make a major contribution to HIV/AIDS research,” he says.

Research on neglected tropical diseases such as hookworm — which influenced the NIH’s decision to award the grant to MITM — will also be conducted in the new labs.

Jeffrey Bethony, Ph.D., and David Diemert, M.D., both associate professors of MITM, are currently working to develop and test a novel, low-cost hookworm vaccine to help control human hookworm infection in endemic countries. Scientists in the department are also trying to understand more about Opisthorchis viverrini, or liver fluke, a cancer-causing worm that is rampant in Thailand.

As for the future, Nixon hopes the new labs will serve as the model for other university labs to emulate, and will one day be internationally recognized as a scientific hub for HIV/AIDS and tropical medicine research. Nixon adds, “We hope that the research conducted in the new MITM space at GW will contribute significantly to reducing the burden of HIV/AIDS and infectious diseases of poverty in the world.”

“If you can get people out of their office and into a space with a welcoming atmosphere, then you create an opportunity to brainstorm and form new ideas.”

—Douglas F. Nixon, M.D., Ph.D.

ON THE WEB
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little more than two decades ago, The George Washington University was seeking to re-establish a bone marrow transplant (BMT) program. Many at the University, including Robert Siegel, M.D., professor of medicine at GW’s School of Medicine and Health Sciences (SMHS), and chief of the Division of Hematology/Oncology at the GW Medical Faculty Associates, believed that having a viable BMT program “was central to maintaining our credibility as a tertiary care center for the treatment of cancer,” in Siegel’s words.

GW had high aspirations for the program and set its sights on a Lebanese-born, 30-something physician at the University of Virginia (UVA). Imad Tabbara, M.D., earned his undergraduate and medical degrees from the American University of Beirut. He completed his fellowship training in hematology/oncology at UVA and was quickly appointed an assistant professor of medicine at the school. For GW, he was “the One.”

Tabbara arrived in Foggy Bottom in 1992 and immediately set about forming a lab and team of nurses, pathologists, and pulmonary and infectious disease specialists. Employing a sunny personality and a steely resolve, Tabbara, who now serves as professor of medicine at SMHS and director of the Blood & Bone Marrow Transplant Program, won over those who doubted the efficacy of a BMT program. In the 20 years since then, GW’s program has performed close to 1,000 transplants, growing from two or three per year to between 30 and 50 annually, and boasting a low 3 percent mortality rate.

Though GW’s BMT program is relatively small — Seattle’s Hutchinson Center performs more than 200 transplants a year, the MD Anderson Cancer Center in Houston does 200 annually, and New York’s Sloane-Kettering about 150 — it’s the only game in town in Washington, D.C., and aspires to grow bigger and better.

“We are the size of other university programs,” says Tabbara. “We draw from D.C., Northern Virginia, and Maryland. In Virginia, the only other program is the Medical College of Richmond, which is two hours away.”

By their nature, BMT programs can be a tough sell. With marrow transplants, unlike many other therapies, patients have to be made very sick before they can be made better. Before the transplant, the patient receives ablative treatment; high-dose chemotherapy, radiation, or both are given to kill any cancer cells. This also kills all remaining healthy bone marrow, to allow new stem cells to grow. A stem cell transplant is done after chemotherapy and radiation is complete. The stem cells are delivered into the bloodstream usually through a tube called a central venous catheter, and they travel through the blood into the bone marrow.

Tabbara speaks of his successful transplants like a proud parent. His first BMT at GW, in May 1992, was a 28-year-old pastry chef in the District suffering from acute leukemia. Twenty years later “she’s alive and healthy and completely fine.” Another woman with acute leukemia didn’t have a donor “but I harvested her stem cells when she was in remission, and she’s now 15 years out and has had two children,” says Tabbara. “Her sister-in-law is a nurse on my team.”

A major impediment to the program’s growth, according to Tabarra, is negotiating contracts with insurance companies. Siegel adds that insurers look for larger BMT programs. “We have a chicken-and-egg situation here,” he says. “If we can build the volume, we can attract the insurers. I’d like to go to 70–100 transplants annually, then we can hire more people and apply to be a member of the International Bone Marrow registry.”

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The term clinical nutritionist brings to mind someone expert in the impact of food on health and wellness; the clinical equivalent of a lifestyle guru, best suited to advising patients about what diets might help them achieve specific health-related goals. Although well-adult care is crucial, especially as our nation faces an alarming obesity epidemic, it's not what inspired Antoinette Saddler to pursue the field, and the image bears little resemblance to her day-to-day duties.

“My patients who need nutrition support often present with severe — sometimes life-threatening — malnutrition,” says Saddler, who earned her M.D. at Case Western Reserve University School of Medicine and completed a fellowship in nutrition support at Memorial Sloan Kettering Cancer Center in New York City in the early ‘90s. “Our first step is to determine if there is any way to feed the patient normally. When that isn’t possible, we have to think about artificial means of restoring their nutritional status.” Such measures include tube feeding and intravenous feeding, explains Saddler, on either a short-term or chronic basis.

Saddler, assistant professor of medicine at GW’s School of Medicine and Health Sciences (SMHS), is a certified gastroenterologist who specializes in clinical nutrition. This means that beyond treating common gastrointestinal problems such as ulcers and acid reflux, she deals with severe digestive disorders such as gastroparesis, which typically requires a combination of dietary intervention and medications.

Saddler, who joined the SMHS faculty in 2006, says that she wasn’t always interested in medicine, but suspects that her childhood exposure to the field — her father was a physician, her mother was a nurse, and her younger sister was born with a number of genetic anomalies that left her mentally disabled — may have influenced her career path. “I had a lot of exposure to illness among my parents’ patients and in my own family, which helps me relate very strongly to my patients and what they’re experiencing,” Saddler says.

She values the multidisciplinary approach inherent to the field of nutrition support. “Unlike a lot of other areas of medicine, nutrition involves medical professionals from a variety of fields. Physicians are a part of that picture, but so are registered dietitians, nurses, and pharmacists. The contributions of each profession are equally important in nutrition, and mastering the art of collaboration is what results in optimal patient care,” she says.

“Dr. Saddler is an outstanding patient advocate who is committed to exceptional care,” says Marie Borum, M.D., Ed.D, professor of medicine at SMHS and director of the Division of Gastroenterology at the GW Medical Faculty Associates, adding that as one of the few clinical nutritionists in the D.C. area, Saddler fills an essential role in promoting optimal health for her patients.

“The contributions of each profession are equally important in nutrition, and mastering the art of collaboration is what results in optimal patient care.”

— Antoinette Saddler, M.D.

The cultural importance of eating makes already complex nutrition interventions all the more difficult. “I think a lot about the cultural and personal importance of being able to sit down and share a meal,” Saddler says. “Many of my patients can’t do that.” When the underlying conditions causing malnutrition are incurable, the question of whether it is appropriate to intervene with nutrition support arises. “I do my best to leave my personal biases out of the equation,” says Saddler. “I try to provide the patients and their families with as much information as I can about the implications of each choice, and then allow their personal wishes, faith, and philosophy to lead them to the proper decision for them.”
An 89-year-old woman is airlifted to George Washington University Hospital (GW Hospital) suffering from degenerative disease — a gradual weakening of tissues and organs due to lifestyle choices and normal bodily wear and tear. “There didn’t appear to be a lick of trauma on this woman,” recalls Babak Sarani, M.D. ’97, RESD ’04. However, trauma, explains Sarani, is not always a case of car crashes or broken bones. In this instance, the patient had ruptured one of the main vessels that carries blood to her leg. “She was going to die,” adds Sarani, director of trauma and acute care surgery at GW Hospital and associate professor of surgery at GW’s School of Medicine and Health Sciences (SMHS). The woman was sent directly to GW Hospital’s interventional radiology lab. There physicians placed a stent across her ruptured iliac artery. Following a blood transfusion, the trauma team brought the patient to the ICU. She made a complete recovery and was released the next day. It’s the resources and infrastructure that come with being a Level 1 Trauma Center that saved this woman’s life, explains Sarani.

GW Hospital recently regained verification as a Level 1 Trauma Center, a distinction, says Sarani, meaning GW Hospital serves “a vital need in the District and in Northern Virginia for care of the injured patient.” Trauma centers are verified by various entities; the American College of Surgeons (ACS) is responsible for assessing trauma centers in Washington, D.C. They are ranked 1 through 3, with Level 1 being the highest, meaning GW Hospital is capable of providing around-the-clock evaluation and treatment for any injury — from prevention through rehabilitation.

“This region would have very poor trauma coverage if it wasn’t for us,” says Sarani. He adds that in 2013, GW Hospital’s trauma center treated 1,863 patients, while average mortality rates for the most severely injured patients entering the trauma center dropped to 22 percent. “If you look across the river in Northern Virginia, the next closest trauma center is Inova Fairfax Hospital in Falls Church. Therefore, if something catastrophic happens in Arlington, in Alexandria, or at Ronald Reagan Washington National Airport, you are looking at very limited resources available to patients in desperate need of proper care.”

In the District, GW Hospital is one of only three verified Level 1 Trauma Centers. GW clinical partner Children’s National Health System is the city’s only Level 1 Pediatric Trauma Center.

Verification brings accountability, says trauma nurse Lois Collins, R.N. “We are held to a certain standard. Every three years we have to answer to the ACS,” says Collins, who also serves as director of trauma services at GW Hospital. “The demands and mandates that are placed on us by the ACS actually allow us to make everyone on our team and in the whole hospital rise to the top.”

The Level 1 designation was critical for Sarani and his team. “The work that goes into making George Washington a Level 1 Trauma Center makes our residency programs better, and ultimately that makes the institution itself stronger.” Being a Level 1 greatly improves quality, he adds.

Collins credits Sarani for leading the charge. “You have to have the right person; you aren’t going to follow unless the right person is leading,” she says.

From an academic perspective, one of the most important aspects of being a Level 1 Trauma Center is research. A Level 1 Trauma Center has a firm number of original research projects that must be published annually, and it must have residency programs with education components built into them. “We have to publish a minimum of 20 papers every three years; that’s roughly seven papers annually,” Sarani says. Whereas a Level 2 functionally has the same capabilities as a Level 1 as far as providing care goes, it doesn’t have the added pressure of creating knowledge. “That’s why it’s so important. We are a university and creating knowledge is in our mission,” he adds.

A Level 1 Trauma Center provides open communication, transparency, and a shared commitment. For Sarani and Collins, it’s all about outcomes. “People are living and living better,” Collins says.
Science sometimes makes the most unlikely connections. So it goes that a hormone most associated with pregnancy just might revolutionize treatment of traumatic brain injuries (TBIs).

A woman’s body naturally expresses progesterone, a hormone that helps set the stage for conception and pregnancy. Although it is widely considered just a “sex steroid,” scientists believe it also might be a potent neurosteroid — a compound that affects neuron activity in the brain. In 1987, Donald Stein, Ph.D., a researcher at Emory University, discovered that female rats recovered more quickly from brain injury than male rats. Ultimately, Stein determined that progesterone was the difference-maker. Subsequent animal studies indicated that early administration of progesterone after TBI reduced cerebral edema, neuronal loss, and behavioral deficits in lab animals.

Now, those discoveries are being translated to human health care in the form of a nationwide clinical trial — ProTECT III: Progesterone for Traumatic Brain Injury: Experimental Clinical Treatment, Phase III — funded through a $28 million National Institutes of Health grant.

Babak Sarani, M.D. ’97, RESD ’04, associate professor of surgery at GW’s School of Medicine and Health Sciences (SMHS) and the director of Trauma & Acute Care Surgery at the George Washington University Hospital, serves as the Washington, D.C., area’s principal site investigator for the study. Physicians such as Sarani hope to enroll 1,140 patients across 15 states to explore the effectiveness of the treatment.

The urgency for a new course of action, he says, is obvious. According to the Centers for Disease Control and Prevention, every 15 seconds someone in the United States sustains a significant brain injury, every five minutes one of those patients is permanently disabled, and more than 50,000 people die each year as a consequence of TBI.

“No one really knows how progesterone heals the brain, assuming it does,” says Sarani. “We think it reduces inflammation in the brain, enhances blood vessel regeneration, and scavenges free radicals that oxidize the brain.” If successful, Sarani says the impact of the study on emergency medicine “will be gigantic, one of the few landmark articles that people should read and memorize.”

ON THE WEB
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It wasn’t all that long ago that medical students, Physician Assistant students, and others training in the allied health fields relied on the nearly 1,000-page Bates’ Guide to Physical Examination and History Taking to learn the crucial examining skills. “We were instructed that if you put your stethoscope in the right spot and heard crackles in the left lower lobe, it was pneumonia,” says Claudia Ranniger, M.D., Ph.D., assistant professor of emergency medicine at GW’s School of Medicine and Health Sciences (SMHS). Ranniger, co-medical director of the school’s new Clinical Learning and Simulation Skills (CLASS) Center, which opened its doors on the fourth floor of Walter G. Ross Hall this spring, recalls, “as students, our response was often ‘OK, if you say so …’ ‘See one, do one, teach one’ was the aphorism of the day.”

Since those “dark days” a little more than two decades ago, simulation has swept the medical education world. Like the practice of medicine itself, simulation has both a human side and a technological side. The human side is embodied by standardized patients (SPs), carefully trained professionals who play the part of patients suffering from any number of medical maladies. Through face-to-face interaction with SPs, students can perfect their skills at history taking, physical exams, and communication.

“Students get feedback from a variety of sources,” explains Karen Lewis, Ph.D., adjunct assistant professor of medicine at SMHS and administrative director of the CLASS Center. “Not only from the faculty, but also from the standardized patients, from their classmates who are watching the encounters, and even by watching themselves on film.”

In addition to providing first-person feedback, the role of SPs in “enhancing communication skills is especially important,” notes Benjamin (Jim) Blatt, M.D., professor of medicine at SMHS and co-medical director of the CLASS Center. “With SPs, learners at all levels — student, resident, faculty — can improve their ability to communicate difficult topics such
"With standardized patients, learners at all levels – student, resident, faculty – can improve their ability to communicate difficult topics such as bad news and become better overall caregivers, skilled at alleviating patients’ emotional as well as medical suffering."

– Benjamin (Jim) Blatt, M.D., professor of medicine at SMHS and co-medical director of the CLASS Center

GW Hospital that had been used for simulation since 2002, features both halves of the simulation world — one side focusing on SPs and the other on technology — joined by a common reception area.

Together, these two components allow SMHS to “train students in the performance of clinical skills, procedures, teamwork, and communication, which we can’t easily do in a patient environment,” Ranniger says. The center complements SMHS’ clinical skills curriculum by giving students what Ranniger calls “a safe place to learn and practice skills without the fear that something bad will happen.”

In addition to 12 outpatient and two inpatient examination rooms for standardized patient encounters, the CLASS Center consists of a labor and delivery suite, a mock operating theater, two high-fidelity rooms, and laboratory space for procedural skills training. Smart Board-equipped conference and debriefing rooms enhance opportunities for performance review — a crucial component of the hands-on training space.

The 99 well-concealed cameras dispersed throughout the center — many of which are mounted low to record facial expression and body position — allow faculty to play back individual and team patient care exercises for students, highlighting the strengths and weaknesses of the performances. “We’re not just interested in patient care in the exam room,” says Ranniger. “The cameras also allow us to monitor what happens during patient transport. How many wires do we run over? How many things do we drop? All of these are important to improve teamwork, which in turn helps us improve care.”

Ranniger explains that the concept of simulation-based mastery learning expects students to learn procedures in the CLASS Center before they are attempted in the real world. “We want students to work in the simulation lab until they’re proficient with the technical skills so that when they’re in the real world and are doing a procedure on a patient, they can manage the procedure and answer the patient’s question instead of having to think about which tool to pick up next.”
A sophisticated data system allows for curricular content to be pushed from a control room to any of the 32 screens mounted throughout the CLASS Center. X-ray images, footage of real patients, and technique demonstration are just a few types of content that can be displayed to students working in the center. “This makes teaching more consistent, and it makes it easier on faculty because they’re not as worried about developing the content,” says Ranniger. “It takes the burden of minutiae away from the instructor and allows their expertise to be used for the more difficult questions.”

The use of advanced medical simulators, including full-body computerized manikins and haptic surgical trainers, is built into each stage of SMHS’ clinical skills training, which spans all four years of medical education and allows students to develop their skills in scientific and clinical reasoning in parallel. Students can learn the basics of a procedure such as IV placement or resuscitation of a critically ill patient using simple anatomic models. More advanced trainees can transition to high-fidelity simulators where students can practice diagnostic skills, integrate previously learned procedures into patient care, and improve teamwork and communications skills. The Physician Assistant program incorporates an abbreviated version of the course, requiring mastery of skills such as blood draws, basic CPR, and wound care.

Blatt also stresses the value of the center as a laboratory for medical education research. “Simulation exercises permit us to see and measure how large numbers of learners perform in clinical-type situations, allowing us to assess the effectiveness of new educational methods. For obvious reasons we could not do this kind of research with real patients.” In a 2010 study published in the journal Academic Medicine, for example, Blatt and research partner Susan LeLacheur, Dr.P.H., M.P.H., associate professor of Physician Assistant studies, demonstrated that an intervention called perspective-taking improved patient satisfaction with students’ interpersonal skills in encounters with SPs. Because patient satisfaction has been linked to better patient outcomes, discovering methods to enhance students’ interpersonal skills is an important mission for medical education. Blatt has also collaborated with medical schools in the Mid-Atlantic Consortium in a study of gender and ethnic bias in the student-SP interactions. The consortium study will appear in Academic Medicine later this year.

The expanded size of the CLASS Center encourages more complex and authentic patient encounters incorporating both standardized patients and mechanical simulation. Standardized patients and task trainers can be employed in single, mixed-modality simulations — thereby improving results in the clinical environment. In one such exercise, students insert an intravenous line into a simulated arm that appears to be a real person (played by an SP), who is very anxious about the procedure. They must successfully accomplish the procedure while building rapport with this anxious “patient.” These types of hybrid exercises and exercises incorporating interprofessional teams such as medical, physical therapy, and Physician Assistant students “are some of the many exciting future directions for the new state-of-the-art CLASS center,” notes Blatt. “Medical practitioners trained at SMHS will graduate having achieved high levels of competency through realistic scenarios created with human and mechanical simulation.”
Changing the Stakes

Faculty Development Initiative Supports New Strategies in the Classroom

BY ANNE BANNER

The stakes are high in medicine — knowledge or skills that a medical student learns in class today might one day save the life of a patient. That means that the stakes in training future doctors are just as high — and in an era where nearly everything related to health care is changing, medical education is changing too.

At GW’s School of Medicine and Health Sciences (SMHS), continued faculty development is a central thread in the fabric of the school. During this time of transition to a revised M.D. program curriculum, faculty members have dedicated themselves to refining the way they relay critical information to their students to ensure maximum retention of the information.

Ray Lucas, M.D., interim associate dean for faculty affairs and professional development and associate professor of emergency medicine at SMHS, and Ellen Goldman, Ed.D., associate professor of human and organizational learning in the Graduate School of Education and Human Development and associate professor of clinical research at SMHS, are guiding this faculty development effort. Lucas and Goldman have led faculty in reviewing literature, conducting a faculty survey, and initiating discussions and workshops on how best to teach in a changing health care environment while also meeting the requirements identified by the Liaison Committee on Medical Education (LCME) and other accrediting bodies.

Additional resources, including a multi-part series, “Best Practices in Active Learning,” and a twice-weekly instructional design workshop with “10-Minute Technology Tips,” have helped faculty members become familiar with iPads and other new technology that has been made available to support instructors. A new instructional designer, Tracy Thompson, dedicated to the M.D. program was also hired to aid faculty members as they embark upon the implementation of new ways of delivering content. An online module is being developed on designing effective class sessions with active learning.

Materials have also been created to assist faculty mentors in the Professional Development and Clinical Skills and Reasoning sessions. These include practical tips on such timely topics as encouraging and assessing reflection, facilitating learning in small groups, and providing coaching to support professional development. Materials on supporting student self-directed learning will also be developed.

This summer, Lucas and Goldman will introduce a Teaching Consult Service, offering peer-to-peer feedback from Master Teacher Leadership Development Program graduates; teaching and learning workshops; and medical education research workshops.

“It is an exciting time as the revised curriculum moves from the idea stage to implementation,” says Lucas. “We’re moving away from much of our traditional lecture format and using active learning strategies to engage our students and make them excited to learn. At the same time, we are making sure to listen to the faculty, and provide support in areas where they feel it’s necessary to reinforce their skills.”

Revising the curriculum and shifting the way courses are taught is no small task, but thankfully, SMHS had something of a head start in this process. For more than a decade, SMHS has offered the Master Teacher Leadership Development Program (MTLDP), directed by Goldman. The yearlong certificate program enhances teaching skills, fosters scholarship, and develops educational leadership potential. More than 116 SMHS faculty members have completed the innovative program, which delves into theories, tools, and methods for teaching students, residents, fellows, other faculty, patients, and families, as well as content on leading organizational groups and teams dedicated to improving patient care delivery. Many of the MTLDP graduates are serving as block directors, theme directors, and discipline directors. These are key roles of the curriculum revision initiative.

“We are very fortunate to have dedicated faculty who are willing to apply innovative teaching methods while presenting very complex material,” says Goldman.
MINIMALLY INVASIVE CHEST SURGERY: BENEFITS EXPLAINED

“Minimally invasive chest surgery isn’t just about having smaller incisions that are cosmetically acceptable,” explains Mortman, who joined GW’s School of Medicine and Health Sciences (SMHS) as an associate professor of surgery in October 2013. “There is less pain, shorter drainage tube durations, and, in turn, shorter hospital stays.”

Mortman, who serves as director of thoracic surgery at the GW Medical Faculty Associates (MFA), performs nearly 90 percent of his cases using minimally invasive procedures. “Almost every patient who walks into my clinic starts out as a minimally invasive candidate,” Mortman says. A number of advantages to the approach have been recognized since the mid-1990s, and recent studies show that there could be survival benefits as well. “A lung cancer patient who has a minimally invasive lobectomy is able to tolerate more of the prescribed chemotherapy after surgery than a patient who undergoes an open lobectomy,” Mortman says. “It’s the holy grail — the patient is going to live longer.”

Prior to joining the SMHS faculty, Mortman served as director of thoracic surgery at MedStar Washington Hospital Center, where he launched the robotic thoracic program in 2011. “The robot has very clear advantages for particular cases,” he says. “It improves visualization, increases instrument precision, and minimizes surgeon fatigue.” Mortman also appreciates the teaching opportunities afforded by the dual console available at the GW Hospital. “By sitting at the second console, the general surgery residents can have the same visualization as I do, and I can give them control of anywhere from one to all four of the robotic arms.”
Mortman says he was attracted to GW for its reputation as a teaching institution. “I have a couple of gray hairs now,” he notes, “but not so many that I’ve forgotten what it’s like to be a resident or medical student. I was fortunate to have great mentors and educators during my training, so I think it’s important to return that favor and educate the next generation.” Mortman’s efforts on this front have not gone unrecognized — he was honored with the Edward Cornwell Award for Teaching Excellence and the Keystone Award for Excellence in Resident Education in 2013.

Anton Sidawy, M.D., M.P.H., Lewis B. Saltz Professor and chair of surgery at SMHS, says that Mortman embodies the full package necessary to advance the thoracic surgery program at GW. “He has the experience, the know-how, and the skills — whether open surgical skills, video-controlled thoracoscopy skills, or robotic surgical skills — to be a well-rounded addition to the team,” Sidawy says.

Under Sidawy’s leadership, Mortman is striving to make GW the “go-to regional thoracic surgery program.” He plans to build upon the successes of Sidawy and Gregory Trachiotis, M.D., professor of surgery at SMHS and chief of cardiothoracic surgery at the MFA, to draw patients from across the D.C. metropolitan area for specialized care. “When somebody thinks thoracic surgery, I want them to think GW’s the place to be. That’s the challenge I accepted,” Mortman says.

With such ambitious aspirations for GW’s thoracic surgery program, Mortman will have to put his athletic dreams on hold a bit longer. In the meantime, there’s always the Department of Surgery softball team. “That’s what really brought me to GW,” Mortman says with a grin.

“By sitting at the second console, the general surgery residents can have the same visualization as I do, and I can give them control of anywhere from one to all four of the robotic arms.”

—Keith Mortman, M.D.

Using foot pedals coupled with subtle wrist and finger movements, Mortman can perform intricate surgical maneuvers that would be extremely difficult by hand.

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Scott Faucett, M.D.: GW’s Slopestyle Orthopedic Surgeon

BY KRISTIN HUBING

At this year’s Olympic Winter Games in Sochi, Russia, more than 20 accidents at Rosa Khutor Extreme Park, the site of the snowboarding and freestyle skiing events such as halfpipe, slopestyle, and moguls, forced many athletes out of the competition. The injuries, widely attributed to dangerous courses and poor conditions, came as no surprise to Scott Faucett, M.D., a team physician for the U.S. Ski and Snowboard teams.

“There were a lot of injuries in the snowboard slopestyle due to the size of the jumps,” explains Faucett, “but snowboard cross and skiercross are notoriously dangerous events because of the speed and the number of athletes on the course at one time vying for the front of the pack.”

Faucett, an assistant professor of orthopedic surgery at GW’s School of Medicine and Health Sciences (SMHS), provides medical assistance for the country’s top athletes as a member of the United States Ski and Snowboard Association Physician Pool. An avid telemark skier, Faucett was a team physician for varsity athletics at Dartmouth College from 2011 to 2012 while pursuing his medical degree at Dartmouth’s Geisel School of Medicine.

“I think it’s fascinating to witness what human beings are capable of,” says Faucett, who completed a fellowship at the world-renowned Steadman Clinic in Vail, Colo., last year, where he collaborated in leading-edge research and trained in the newest surgical techniques. “The role of the team physician is to act as a patient advocate and make sure that a high standard of care is being provided. We don’t have medical licenses to practice abroad, but we do know what to expect if our athletes were to be treated in the United States,” he says. “If they can’t get the appropriate care abroad, we help get them evacuated.”

Though he did not attend the Sochi games, Faucett has traveled to events such as the Burton European Open in Switzerland and the World Cup Race in Beaver Creek, Colo. “Our main goal is athlete safety — to make sure they don’t put themselves at further risk after injury by continuing to compete when it’s unadvisable,” he says. “We also manage the safety and athlete assessments to make sure they are fit for competition and training.”

At the events, team doctors treat more than just musculoskeletal problems. “We come with our own medical kit so that we can treat the athletes for everything — respiratory infections, skin infections, urinary infections,” Faucett explains. “On the slopes,” he continues, “we carry a trauma pack that includes the tools necessary to insert chest tubes and surgical airways, as well as to do splinting.” The most common injuries he sees are to the knee, shoulder, back, wrist, and head.

When he’s not traveling the world with star athletes, Faucett is practicing orthopedics at GW’s Medical Faculty Associates, where he focuses on hip and knee orthoscopic procedures, cartilage restoration, and ligament reconstruction. “I treat all kinds of arthritic and non-arthritic conditions,” he says. “Everything from chronic hip or knee injury to hip or knee replacement.”

“Dr. Faucett brings a unique skill set to our faculty,” says Andrew Neviaser, M.D., assistant professor of orthopedic surgery at SMHS. “He is an expert in joint preservation surgery, where he focuses on hip and knee orthoscopic procedures, cartilage restoration, and ligament reconstruction. I treat all kinds of arthritic and non-arthritic conditions,” he says. “Everything from chronic hip or knee injury to hip or knee replacement.”

“The decisions Faucett makes on the slopes are very different from those he makes while practicing in Washington, D.C. “It goes beyond the medicine. These are people’s jobs,” he explains. “But it’s that complexity surrounding the balance of athlete safety and performance that motivates me to continue doing this work.”

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Physician Assistant in Space

On Christmas Eve 2013, as children around the world were nestled snug in their beds waiting for Santa Claus, NASA astronauts Rick Mastracchio and Mike Hopkins suited up and prepared for an Extra-Vehicular Activity (EVA) – or spacewalk – to repair the International Space Station’s orbiting outpost’s critical external cooling system.

BY LAURA OTTO
It was the second in a series of spacewalks quickly planned after the space station’s starboard cooling pump developed problems. Back on Earth at NASA’s Mission Control Center, Randall Owen was closely monitoring the health of the astronauts. With so much on the line, stress and fatigue could spell disaster for the mission. “We use an electrocardiogram to check for problems with the electrical activity of their heart and observe their vital signs for up to eight hours at a time,” he says.

When orbiting at a height of 230 miles above the Earth’s surface at a speed of more than 17,000 miles per hour, calling for an ambulance during an emergency isn’t in the cards. Enter Owen, M.S.H.S., PA-C ’13, a medical operations specialist in space flight operations at NASA’s Johnson Space Center (JSC) in Houston, Texas. Owen trains International Space Station (ISS) operations crew members to be their own first responders, teaching them to perform in-flight medical procedures, such as phlebotomy and ocular exams, as well as respond to emergencies such as broken legs or heart attacks.

Owen, a graduate of GW’s School of Medicine and Health Sciences (SMHS) Physician Assistant Program, landed at NASA in April 2014. He was the first PA student to complete a four-week clerkship in aerospace medicine at the JSC.

The clerkship, which historically has been offered only to fourth-year medical students, gives participants the chance to work on an aerospace medicine project, attend lectures, and become familiar with the medical aspects of ISS operations, design, and function.

Participants in the clerkship are required to complete a research project based on an area of space medicine. Owen focused his research on Entry Motion Sickness (EMS), which astronauts often experience when returning from the microgravity environment of space to Earth’s one G-force atmosphere. The longer astronauts are away from Earth’s gravitational field, the more time it takes for them to return to normal, explains Owen, whose research showed that “for three- to six-month missions, the EMS symptoms seem to require a minimum of a few days to up to 30 days to fully resolve.”

A Southern California native, Owen was the only one of six siblings to attend college. Prior to earning his bachelor’s degree in physics at the University of Texas at Dallas, Owen served in the United States Air Force and Air National Guard for eight years. It was there, Owen explains, that his interest in aerospace medicine really took flight.

An engineer and project manager for more than 20 years, Owen fell victim to the recession. In 2009, after being laid off for a fourth time in nine years, he decided to change career paths completely.

“I had always been interested in medicine and had briefly considered medical school,” he says. “But at my age, four years of medical school followed by a three- to five-year residency just didn’t seem practical.” So Owen enrolled in a full-time, one-year course to become a certified surgical technologist while taking prerequisite courses for PA school in the evenings.

Owen arrived at GW in May 2011. “I knew I was embarking on a life-changing journey in the company of an amazing group of students and faculty,” Owen says. The PA program at SMHS offered the academic rigor Owen was looking for in his training. At the same time, he was able to explore areas of medicine through the program’s elective clinical rotations.

Orbiting at a height of 230 miles above the Earth’s surface at a speed of more than 17,000 miles per hour, calling for an ambulance during an emergency isn’t in the cards.

It was the mentorship and support of Debra Herrmann, M.S., assistant professor of Physician Assistant studies at SMHS, that helped Owen reach his goal of supporting the health of crew members aboard the ISS. Herrmann says she found Owen’s professionalism, maturity, and real-world experiences extremely valuable when discussing complex issues in patient care. “We all benefited from his perspectives,” says Herrmann, who is extremely proud of Owen for representing SMHS’ PA program and the profession at NASA.

The sky is the limit for Owen, who is currently focused on establishing educational and employment paths for PAs interested in aerospace medicine. “I hope to identify clinical and non-clinical employment opportunities within both the government and commercial segments, such as NASA, SpaceX, and Orbital Sciences,” he explains.

For Owen, his experiences at GW, especially through the public service examples set by the PA faculty, “have made all of this possible.”
For the past 10 seasons, TV viewers have watched as surgical resident, and now surgical attending physician, Meredith Grey makes her rounds at Grey Sloan Memorial Hospital, diagnosing patients and deciding whether they require surgery. From there, it’s into the operating room, where the real drama unfolds. In the midst of all this chaos, Grey must perform under pressure while enduring long hours and little sleep and balancing her personal and professional life.

OK, maybe it only happens that way in Hollywood, but Hope Jackson, M.D. ’09, can certainly relate to Grey’s struggle to achieve personal satisfaction and professional success in medicine. Jackson, a PGY5 resident in the surgery program at GW’s School of Medicine and Health Sciences (SMHS), has always had a passion for medicine and media. “For me, connecting media and medicine is all about finding ways to disseminate positive and accurate messages about leading healthy lives to children and adults,” Jackson says. That drive and ambition would lead her to the set of the award-winning television series as a medical consultant.

When Jackson was a third-year medical student, she met emergency medicine physician Zoanne Clack, M.D., M.P.H., who at the time was also a medical writer for Grey’s Anatomy, at a medical conference in New York. Clack described how she was able to pair her enthusiasm for media and her training in medicine into a successful career. At the time, Jackson had

Hope Jackson, M.D. ‘09, serves as a medical consultant on the television drama Grey’s Anatomy

By Laura Otto
not determined what medical specialty she wanted to pursue. Clack suggested Jackson first pinpoint what she wanted to do in medicine and encouraged her to keep in touch.

It was during a research year as a surgical resident that Jackson saw an opportunity to pursue all of her interests, not just in medicine but also in health care and how it’s portrayed in the media. Jackson reconnected with Clack. “I felt that my experiences as a surgical resident could contribute a lot to the show,” she recalls. Clack told Jackson that, despite nearing the close of its ninth season, the show had never had an actual surgical resident on set. “I had an interview with the show’s team, and the rest is history.”

Jackson packed her bags and flew to Los Angeles and the set of Grey’s Anatomy. For the next two months, she worked alongside the cast and crew, learning how medicine could be used to tell creative, powerful, and sometimes humorous stories.

Paired with the on-set medical advisor, Jackson experienced the full gamut of television production, from table reads to set creation, where directors and producers transform a typical Hollywood set into an operating room or doctor’s office; and finally to the rehearsals, where she watched as the actors read through the script before taping the finale.

For Jackson, one of the most exciting aspects was “working with the actors one-on-one, helping them pronounce medical terms and teaching them how to use their hands in certain scenes to make the operation look as realistic as possible,” she says. “I helped the writers make edits to medical terminology and the procedures used, watched the episode being filmed in its entirety, and saw what happens in post-production before a show airs.”

Once the season-nine finale wrapped, the writers immediately began working on season 10. Jackson was allowed to participate in the writer’s room discussion and share her experiences in surgery with the writers and producers. “I was an in-person medical dictionary for the writers,” she jokes.

Jackson always wanted to participate in medical communications. “I think this field is a really unique opportunity for physicians to play a part in how health information is distributed to the public,” she says. “Moving forward I’d like to expand my work in medical correspondence to include not just the entertainment industry, but also national and local news.”

For Jackson, the experience “was an amazing opportunity to work with a team committed to making sure the medicine included was accurate and, most importantly, understandable.”

In an effort to extend the opportunity for other surgical residents to serve as medical consultants on Grey’s Anatomy, Jackson and her mentor Clack helped establish the Grey’s Anatomy Medical Communications Fellowship. During a three-month medical communications fellowship, residents will work under the direction of Clack, executive producers, and showrunner Shonda Rhimes at Grey’s, as well as conduct translational research at Hollywood, Health & Society at the University of Southern California’s Norman Lear Center. The post is open to individuals who have completed at least two postdoctoral years in an accredited surgical training program.

A longtime fan of the show, Jackson says she will always be grateful to the cast and crew of Grey’s Anatomy for her extremely unusual experience. During her time in Los Angeles, she says, “I gained invaluable experience in medical writing, hospital set design, editing, and production that I look forward to expanding upon in the future.”
As a pathologist, Yolanda C. Oertel, M.D., RESD ’72, always tried to practice medicine using both her head and her heart. Over a career spanning more than three decades, her two-pronged approach bore the stamp of medical humanities — the interdisciplinary field that applies humanities, the arts, and social sciences to medicine — a fact Oertel believes always made her a better pathologist. “As physicians we have the brainpower, but we have to remember that we also have a heart and it needs to be nourished by the arts and humanities,” she says.

Yolanda and her husband James E. Oertel, M.D., who passed away on Dec. 5, 2013, donated $2.5 million to the GW School of Medicine and Health Sciences (SMHS) to establish the Yolanda and James Oertel Professorship for the Medical Humanities. The couple hoped that an endowed professorship would help incorporate the study of medical humanities into medical education and give students and physicians the opportunity to gain a deeper understanding of the human condition and improve their clinical skills.

“Endowed professorships are among the highest form of honor and recognition in academic medicine,” says Jeffrey S. Akman, M.D. ’81, RESD ’85, Walter A. Bloedorn Professor of Administrative Medicine, vice president for Health Affairs, and dean of SMHS. “Dr. Oertel is a renowned physician who exemplifies ‘whole person’ care. Her gift will support the recruitment and retention of the best and brightest physicians and professors.”

The training Oertel received at SMHS has greatly contributed to her success in the field of pathology. “I feel it’s my duty to give back in a way that allows future physicians to have the same opportunities and experiences I did,” she says.

As a pathology resident, Oertel was influenced and impressed by the diagnostic ability of William Newman, M.D., former director of anatomic pathology and professor of pathology at SMHS. She describes Newman, a mentor and friend, as an excellent physician who treated his patients with respect and compassion. “He empathized with his patients,” recalls Oertel. “He would say, ‘You have to consider the patient in every decision you make as a physician.’” In anatomic pathology, she explains, physicians spend their time examining tissue sections under a microscope; as a result they can sometimes lose sight of what they’re looking at. Newman, she says, always reinforced the fact that on that slide is part of a human being.

Medical humanities seeks to provide a greater understanding of the human condition. Attention to literature and the arts helps clinicians develop and nurture their skills of observation, analysis, and empathy. Oertel says her medical career has been greatly influenced by the arts and her love of reading and music.

The field of medicine is constantly evolving, but one thing will never change, according to Oertel. “We exist to serve the patient. We have to make the patient part of every diagnostic decision we make as physicians,” she adds.

The Oertels’ gift will endow the Professor and Director of the SMHS Medical Humanities Program, which will be the first commitment for a named professorship in this discipline at the school.

“I think the role of humanities and art in medical education is finally being appreciated and really understood in today’s medical arena,” Oertel says, “and I think GW is at the forefront of this movement.” ■
Help for Those at a Higher Risk

Major Gift by Ruth Uppercu Paul Funds Genetic Counselors and Patient Assistance Support

BY KRISTIN HUBING

Those who know Ruth Uppercu Paul best recall a warm smile and a twinkle in her eye. “She had a wonderful sense of humor and a quick wit,” says Christine Clemens, a close friend of Paul’s for more than two decades. “She was a great conversationalist who would regale us with tales of her youth and her travels.” The vibrant individual whom Clemens remembers hasn’t been present since a debilitating stroke in 2012, but she is far from forgotten by those whose lives she touched — a list that will now include countless women at high risk for breast and ovarian cancer, as well as persons with hearing impairment.

Paul’s generous $1 million gift to the High-Risk Breast and Ovarian Cancer Clinic at the George Washington University Medical Faculty Associates (MFA) will enable the clinic to fund two genetic counselors and provide patient assistance support for genetic screening and counseling. The Ruth Uppercu Paul Cancer Prevention Fund, which is administered by the Dr. Cyrus & Myrtle Katzen Cancer Research Center at GW, may also be used to outfit new multidisciplinary space for the program.

“This donation is integral to achieving our dual goals of establishing a program for clinical care for women at high risk for these two malignancies and of contributing more extensively to research in the field,” says breast care specialist Rebecca Kaltman, M.D., assistant professor of medicine in the Division of Hematology and Oncology at GW’s School of Medicine and Health Sciences (SMHS). “The genetic testing that we’re doing is even more complicated than BRCA 1 and 2 mutations, so having specialized genetic counselors is crucial.”

Paul, who turned 97 years old in March, successfully battled both ovarian and breast cancer in her late 80s, while under the care of Jeffrey Lin, M.D., clinical professor of obstetrics and gynecology at SMHS. “She was an extraordinary combination of determination and gentleness,” says Constance U. Battle, M.D. ’67, a friend and former colleague of Paul’s for more than 40 years, who now serves as her health and legal representative. “Ruth was most appreciative of being helped when she personally experienced ovarian and breast cancer. Subsequently, she became interested in helping others find out about their diagnoses earlier,” explains Battle, who is a clinical professor at SMHS as well as an adjunct professor in the Department of Prevention and Community Health at GW’s Milken Institute School of Public Health.

“Ruth is very much a giver, as well as a doer,” says Sally Smith, former fundraising and public relations officer, who worked closely with Paul during her tenure on the board of directors at the Hospital for Sick Children in Washington, D.C., now the HSC Pediatric Center. “She was a woman of independent means who found life engaging and used her wealth to better the lives of others,” Smith says.

A native of New York, Paul attended Kent Place School in Summit, N.J., and Smith College in Northampton, Mass. During World War II she served as a political research analyst with the Office of Strategic Services, the predecessor to the Central Intelligence Agency (CIA), and later as a CIA operations case officer. “I always had the sense that she had been a groundbreaker,” Smith says.

After experiencing profound hearing loss during middle age, Paul and her twin sister, Miriam Leslie, took part in a national twin study about hearing loss. “Ruth had great empathy for those who were unable to hear,” says Battle, “as evidenced by her gift of $450,000 to create the Ruth Uppercu Paul Fund for Hearing Health and Rehabilitation at the MFA’s Division of Otolaryngology and Neurotology.” The fund supports the division’s Comprehensive Hearing Center in its efforts to treat patients who do not have the financial resources to cover services, such as cochlear implants and hearing aids. Paul has also elected to donate her temporal bones to research upon her death.

“We’re so incredibly grateful to Ruth Paul for having this vision with us to offer an amazing service for our patients,” says Kaltman. “She is providing a truly great service to GW and our community.”
It was the summer after Laura Perry’s sophomore year at Harvard University when she accepted an internship at the Baltimore City Health Department, a decision that would completely alter the course of her career. For three months she shadowed health department employees and worked closely on regulation and policy issues. Perry, now a third-year internal medicine resident at the GW School of Medicine and Health Sciences (SMHS), always had a passion for public health and an interest in large-scale problem-solving. But it was the opportunity to work with the then Baltimore health commissioner, Peter Beilenson, M.D., M.P.H., that convinced her that becoming a physician was the best way to effect change on both large and small scales. “Beilenson is a brilliant visionary,” Perry says. “He sees how being a public servant can be a way of enacting positive change.”

Beilenson’s influence took root, and now Perry hopes to parlay her interest in public health into a primary care career. “Becoming a primary care physician allows me to change my patients’ lives for the better,” she says.

Perry grew up in Dartmouth, Mass., a small town about an hour outside Boston. She earned her bachelor’s degree from Harvard University, where she studied the history of medicine, and later earned her medical degree from the Emory School of Medicine in Atlanta, Ga.

From a public health perspective, primary care was really the only field that made sense for Perry. And, explains Perry, because GW has one of the oldest primary care tracks in the country, the school was possibly her best choice for a residency. The program is unique in that it “offers a solid foundation in outpatient clinical medicine and has a strong clinical focus.”

As a resident, Perry is putting her problem-solving skills to work as chair of the Resident Peer Review Committee (RPRC). The committee ensures that all GW patients receive the highest-quality care and that SMHS residents are working in an environment that is conducive to such care. Perry oversees the review of cases and production of opinions, serving as a liaison between the committee and hospital/program leadership.

“Laura’s interest in solving large-scale problems, coupled with her desire to create positive change within the health care field, makes her the ideal person to lead the Resident Peer Review Committee,” says Nancy Gaba, M.D. ’93, RESD ’97, Oscar I. and Mildred S. Dodek and Joan B. and Oscar I. Dodek Jr. Professor, and chair of the Department of Obstetrics and Gynecology and associate dean for graduate medical education at SMHS. As chair, “she is bringing together residents from all specialties at GW to find common interests and make meaningful progress.”

“When there is a problem or a system isn’t functioning the way it should, the RPRC can address it formally,” explains Perry. Often the committee has identified systemic problems that contributed to poor outcomes. In these instances, Perry says, “we develop committee opinions regarding both the nature of the problem and potential solutions.” With the support of Gaba, the RPRC has developed strong working relationships with both the hospital administration and residency directors, and, says Perry, they have been able to facilitate a variety of positive changes for the hospital.

Going forward, Perry plans to stay on as chief resident at the Washington, D.C., Veterans Affairs Medical Center, after her graduation this summer. Her role will combine quality improvement, teaching, and clinical supervision as a wards attending. Her portfolio in public health has led her to the conclusion that she will never do just clinical medicine. “It will be half of what I do,” she says. The other half will be “teaching medical students and improving health care from a broader standpoint.”
Brittne Jackson, M.P.H., fondly remembers Sunday afternoons spent with her grandmother Madeline Jackson, visiting her relatives at the local nursing home. “I vividly remember watching my grandmother with her sisters,” she recalls.

As a young child, Jackson found this setting extremely intriguing. “I wondered, ‘why can’t they sit up or walk around like me?’” During her visits, Jackson watched as physical therapists (PTs) came to work with her relatives in the nursing home’s gym to help them regain their mobility. Having the opportunity to see how elderly people become less agile with age, as well as the part PTs played in helping them regain some of their lost mobility, stuck with Jackson. The experience gave her a greater appreciation and respect for the elderly, fostered her sense of community, and ultimately “set the course for my career in physical therapy.”

For Jackson, a second-year PT student at GW’s School of Medicine and Health Sciences (SMHS), pursuing a career in PT is a privilege. “You are able to develop relationships with your patients and impact their quality of life by improving or restoring their mobility through hands-on, one-on-one treatment,” she says.

Community service is what drives Jackson. “Our program takes pride in going out into our community and making it known that PTs can and want to help you,” she says. There are certain skills that PTs bring to the table that people don’t know they are trained to do. The role of a PT, says Jackson, is not just to help restore a patient’s mobility, but to promote overall wellness in the community.

“Brittne exemplifies what it means to give back to your community,” says Ellen Costello, Ph.D., associate director for the program in physical therapy and associate professor of physical therapy and health care sciences at SMHS. “Her maturity and professionalism are to be admired.”

From the first day she stepped onto the Foggy Bottom campus in the fall of 2012, Jackson felt at home. “I found GW’s interview process to be one of the most inviting,” she recalls. “The staff and faculty make an effort to get to know you as a person and encourage you to express the many sides of your personality.” The warm welcome, coupled with the program’s combination of hands-on training and community engagement, was the perfect fit for Jackson.

Born and raised not far from GW in Rockville, Md., Jackson earned her bachelor’s degree in health sciences with a concentration in pre-physical therapy from Howard University and a master of public health degree with a concentration in behavioral health from Morgan State University in Baltimore. Jackson says her grandmother, the second-youngest of 13 children, was responsible for taking care of her older siblings. “I watched my grandmother take care of her sisters, as well as other residents in that nursing home, simply by interacting with them,” she says.

Jackson says those experiences as a young child have greatly influenced the way she wants to practice PT. “When you go into a nursing home and see people who have lost most or all of their bodily functions, it really puts what I do into perspective,” she says. “It has taught me the importance of treating the ‘whole person’ and not just their impairment, which is the key to physical therapy.”

Brittne Jackson, M.P.H.
Leading the Charge
Kurt Newman, M.D., Turned a Two-Year Fellowship into a Lead Role at Children’s National Health System

BY KRISTIN HUBING

There was a time when Kurt Newman, M.D., president and CEO of Children’s National Health System, considered a career in politics. “I was a very idealistic undergraduate,” he recalls. “I knew I wanted to make a positive impact on our society.” Fortunately, a summer job as an orderly in the emergency department at the North Carolina Memorial Hospital, now UNC Health Care, demonstrated to Newman that he could make that impact within the field of medicine.

“I fell in love with medicine that summer,” says Newman, who also serves as a professor of surgery and pediatrics at GW’s School of Medicine and Health Sciences (SMHS). “I just loved the interaction with patients and I saw a way to incorporate my interest in science with helping people directly.” His initial intention was to become a cardiologist, but, while pursuing his M.D. at the Duke University School of Medicine, Newman had a personal encounter that altered the course of his studies. “I had such a positive experience with the surgeon who treated me for a thyroid tumor that I decided that was the career for me.”

The direction of Newman’s career has been largely influenced by serendipitous events — a theme that he plans to highlight during his commencement address to the SMHS M.D. Class of 2014. “I want to encourage students to stay open to new ideas and to let things resonate,” he says. “Don’t create a plan that doesn’t allow for unexpected opportunities to arise.” Newman, who claims to never have envisioned becoming the president of a hospital, believes that “it’s never too late to go in a new direction. You just don’t know where it might lead.”

In 1984, Newman embarked upon a two-year pediatric surgery fellowship at Children’s National, which houses SMHS’ Department of Pediatrics. “It’s been almost 30 years since then, and I’m still here,” he observes, with a chuckle. His dedication to the hospital and its partnership with SMHS throughout the decades is indisputable.

“Dr. Newman’s gracious, easygoing manner, as well as his talent for medicine, research, and education, has led him to become an admirable leader at Children’s National during a period of tremendous growth,” says Jeffrey S. Akman, M.D. ’81, RESD ’85, Walter A. Bloedorn Professor of Administrative Medicine, vice president for health affairs, and dean of SMHS. “I can’t think of a better person to issue a charge to our graduates as they prepare to take the next step in their commitment to our profession, to our communities, and to the lives of others.”

Newman held a variety of leadership positions at Children’s National before assuming the presidency, including surgeon-in-chief, senior vice president for the Joseph E. Robert Jr. Center for Surgical Care, and co-founder and acting vice president for the Sheikh Zayed Institute for Pediatric Surgical Innovation. “He’s the best talent scout there is,” says Andrea Badillo, M.D. ’00, RESD ’09, assistant professor of surgery and pediatrics at SMHS and attending surgeon at Children’s National. “He finds good people and brings them together to do innovative things.”

Badillo, who was mentored by Newman throughout her SMHS medical education and residency, greatly valued his generosity with his time. “He was very open about his own development as a surgeon and helped advocate for me as I pursued the field,” she says. “It’s an incredible thing to find such a warm person in a professional environment.”

Newman cites Children’s National’s significant role in the Washington, D.C., community as one of the most rewarding aspects of serving as its president. “Most children’s hospitals will attempt either to be the safety net for all — caring for children in the community regardless of their families’ financial resources — or to become a nationally ranked hospital with high-end specialty care and renowned researchers,” he explains. “Children’s National has always had the dual dream of doing both.”

Despite his gratitude to the surgical team at GW, who embraced him as a part of their community early in his career — “It was very meaningful to me, being away from where the mainstream crowd was in surgery” — Newman considers Children’s National to be his family. It’s even where he met his wife, Alison, a neonatal nurse practitioner, in 1986. “It’s the most exciting place to practice, to lead, to educate, and to talk about the importance of what we’re doing,” he says. “And that’s where I get my kicks.”
GW’s Marie Borum Chosen for Executive Leadership Fellowship

Marie Borum, M.D., Ed.D. ’03, M.P.H. ’95, RESD ’88, professor of medicine at GW’s School of Medicine and Health Sciences (SMHS), and director of the Division of Gastroenterology and Liver Diseases, has been selected as a member of the 2014-15 class of Fellows in the Hedwig van Ameringen Executive Leadership in Academic Medicine (ELAM) Program. The appointment places Borum among the nation’s leading women in academic medicine, dentistry, and public health.

The intensive one-year fellowship program supports executive education, personal leadership assessments and coaching, and networking and mentoring activities. Fellows develop a broader vision of their role within their academic health centers; enhance their leadership effectiveness, understanding of strategic finance, and ability to lead organizational change; and join an active resource network of women leaders.

Star Struck

Two GW School of Medicine and Health Sciences (SMHS) faculty members, Jacqueline S. Barnett, M.S., assistant professor of Physician Assistant studies, and Ellen F. Goldman, Ed.D., M.B.A., associate professor of clinical research and leadership and human and organizational learning, and director of the Master Teacher Leadership Development Program, were among the 2014 Bender Teaching Award recipients. The annual award is part of GW’s efforts to honor teaching stars for their academic standards and transformative teaching practices.

Barnett and Goldman, along with other faculty award winners, were honored at the Fourth Annual Faculty Honors Ceremony on March 31 for their dedication, research, and service to GW.

The awards, endowed by Morton Bender and the university, recognize undergraduate, graduate, and professional instruction. Winners receive a $1,000 prize to be used for professional development.

Pulling the Trigger on Cardiac Regeneration

Cardiac tissue is tricky stuff. Once it’s damaged it’ll never be the same. However, GW School of Medicine and Health Sciences (SMHS) researcher Scott Shapiro, M.D., Ph.D., may have uncovered a gene that stimulates heart cells to fix themselves.

Following a heart attack, millions of cardiac cells die as a result of disrupted blood flow, often causing serious complications. Once those cells have died, they’re replaced by scar tissue, which doesn’t properly conduct the electrical impulses that trigger the heart to beat. The conflict between the remaining healthy heart cells’ rhythm and the scar tissue exposes patients to life-threatening arrhythmia.

Shapiro’s study, titled “Cyclin A2 Induces Cardiac Regeneration after Myocardial Infarction through Cytokinesis of Adult Cardiomyocytes,” and published in Science Translational Medicine, found that a key protein, Cyclin A2 (Ccna2), can elicit a regenerative response in pig hearts. Shapiro and his research team first looked at small animals such as the zebrafish, which are able to regenerate heart tissue after a heart attack.

“After seeing the effects of Ccna2 in small animals, we began looking at the effects of the gene in larger animals, such as pigs,” says Shapiro, assistant professor of medicine at SMHS. “We delivered Ccna2 directly into the heart and not only found that pigs had improved cardiac function, but also found evidence of cellular regeneration.”

Ccna2 is a prenatal gene normally turned off in humans after birth. Shapiro believes using gene therapy as a tool for cardiac regeneration could lead to a viable treatment option for patients following a heart attack.

New Connections: Cholesterol, Neurology, and HIV/AIDS

Prions – a blur of the words protein and infectious – are self-replicating clumps of proteins that can lead to a host of neurological disorders. The relationship between cholesterol metabolism and prion infection, however, also bears a striking resemblance to that of HIV and cholesterol. New research published in the Journal of Biological Chemistry by GW School of Medicine and Health Sciences (SMHS) researcher
Michael Bukrinsky, M.D., Ph.D., shows striking similarities in the way the two diseases metabolize cholesterol.

Bukrinsky, a professor of microbiology, immunology, and tropical medicine, and his research team identified a relationship between impairment of cellular cholesterol transporter ABCA1 and the conversion of prions into the diseased form, which occurs in membrane domains of neuronal cells or “lipid rafts.”

“The effect of prions on ABCA1 and lipid rafts is very similar to what we found with HIV before, suggesting that while prions and viruses are very different, they seem to target the same cellular mechanism of cholesterol metabolism,” says Bukrinsky. “This mechanism may be key to controlling many different diseases. It may be that drugs that stimulate ABCA1 can help not only to target prions and HIV, but also a number of other pathogens.”

Bukrinsky and his research team found that brain cells loaded with lipids are actually less likely to be susceptible to prion disease. When neuronal cells are loaded with cholesterol, it counteracts this effect of prions on ABCA1 and lipid metabolism. While in most circumstances having a high-fat diet is a prescription for trouble, this finding suggests that fats and lipids can actually prevent prion disease. “This isn’t a recommendation, as we are talking about a very specific cell type and under special circumstances,” cautions Bukrinsky, “but it’s an interesting possibility.”

Promoting Mentoring and Humanism at SMHS

A grant from the Arnold P. Gold Foundation will support a new initiative at GW’s School of Medicine and Health Sciences (SMHS) promoting mentoring opportunities and humanistic education. The project, “Training Faculty to be Mentors in Humanism: A Faculty Development Program to Nurture Students’ Inner Growth,” is led by Benjamin Blatt, M.D., professor of medicine at SMHS, in collaboration with GW faculty members Christina Puchalski, M.D., director of the GW Institute for Spirituality and Health (GWish) at SMHS; Matthew Mintz, M.D. ’94, RESD ’97, associate professor of medicine and interim dean for M.D. program curriculum; Linda Raphael, Ph.D., associate clinical professor of psychiatry and behavioral sciences at SMHS; and Ellen Goldman, Ed.D., M.B.A., associate professor of clinical research and leadership at SMHS. The program is designed to prepare faculty to take an advanced mentoring role in the revised medical curriculum, which will begin in fall 2014. The grant will support a series of faculty development workshops and the creation of a faculty learning community to explore the mentors’ own humanistic growth.

“This is an exciting time for faculty development at SMHS and we are so pleased to be a recipient of the Arnold P. Gold Foundation grant. The initiative will prepare faculty to guide students along newly developed pathways for inner professional development, as well as for clinical skills and reasoning,” says Blatt.

Puchalski and Blatt, along with Ann Doucette, Ph.D., research professor in GW’s Columbian College of Arts and Sciences, also recently received a $558,502 grant from the John Templeton Foundation for their project “GWish Templeton Reflection Rounds II: Sustaining Spirituality-based Competencies in Medical Education.”

The grant supports the incorporation of mentored reflective practice into the mainstream clinical schedule of clerkship medical students. The project fosters students’ inner life development so they are prepared to address the emotional and spiritual side, as well as the biological suffering, of their patients.

“This ability to reflect is critical to practicing with integrity, accountability, compassion, and respect for others,” says Puchalski. “With the guidance of highly experienced faculty mentors, students share their experiences and perspectives with others and then listen as others share their experiences.”

Getting a Boost from a Mini Heart

A novel idea from GW School of Medicine and Health Sciences (SMHS) researcher Narine Sarvazyan, Ph.D., could send relief to countless patients around the world suffering from chronic venous insufficiency—a disease in which patients experience sluggish venous blood flow from the legs back to the heart.

Sarvazyan, a professor of pharmacology and physiology at SMHS, has invented a new organ to help return blood flow from veins lacking functional valves. A rhythmically contracting cuff made of cardiac muscle cells surrounds the vein, acting as a “mini heart” to aid blood flow through venous segments. The cuff can be made of a patient’s own adult stem cells, eliminating the chance of implant rejection.

“We are suggesting, for the first time, to usestem cells to create, rather than just repair damaged organs,” says Sarvazyan. “We can make a new heart outside of one’s own heart, and by placing it in the lower extremities, significantly improve venous blood flow.”

This potential new treatment option, outlined in a paper titled “Thinking Outside the Heart: Use of
Engineered Cardiac Tissue for the Treatment of Chronic Deep Venous Insufficiency,” published in the Journal of Cardiovascular Pharmacology and Therapeutics, represents a leap for the tissue engineering field, advancing from organ repair to organ creation. To date Sarvazyan, together with members of her team, has demonstrated the feasibility of this novel approach in vitro and is currently working toward testing these devices in vivo.

Lead Roles

GW’s School of Medicine and Health Sciences (SMHS) announced several new appointments to key positions in the school this spring.

Lawrence “Bopper” Deyton, M.D. ’85, M.S.P.H., has been named senior associate dean for clinical public health for SMHS. In this new position, Deyton will provide guidance on curricular efforts; mentor students, trainees, and faculty; foster the development of funded research programs; and elevate the profile of SMHS in issues of clinical public health.

Deyton will work in collaboration with other GW schools, such as the Milken Institute School of Public Health, as well as with outside organizations to promote education and training for clinicians on public health, population health, and the clinical applications of these principles to their professional responsibilities.

“We at GW can and should be seen as the foremost educator of health care providers who are clinical public health leaders in their professional lives and in the communities where they live,” says Deyton. “GW is a place that not only produces great clinicians, but is in close proximity to where major health decisions are made.”

Lorenzo Norris, M.D., will provide leadership in the development and implementation of effective academic counseling related to students in their third and fourth years of study as the school’s interim assistant dean for student affairs. Norris, assistant professor in the Department of Psychiatry and Behavioral Sciences, will work in concert with other SMHS deans to develop and implement effective career counseling programs and will serve as a resource for the M.D. program’s diverse student body.

Matthew L. Mintz, M.D. ’94, RESD ’97, FACP, associate professor of medicine, was named the interim assistant dean for M.D. program curriculum.

Mintz will hold primary responsibility for the development and implementation of the revised, integrated M.D. program curriculum. Staying abreast of current trends in medical education, he will advise the dean and faculty on directions for curricular change and improvement. Mintz will also provide support for the ongoing development, implementation, and evaluation of the school’s undergraduate medical education curriculum.

Jeffrey Berger, M.D., M.B.A., associate professor of anesthesiology and critical care medicine, has been named the interim associate dean for graduate medical education (GME) following the appointment of Nancy Gab, M.D. ’93, RESD ’97, FACOG, to serve as chair of the Department of Obstetrics and Gynecology.

In this position, Berger will monitor and enhance the education provided to all residents and fellows at SMHS and participating institutions, such as the GW Hospital, GW Medical Faculty Associates, and Children’s National Health System. He will serve as the chair of the GME Committee and the designated institutional official for the Accreditation Council for Graduate Medical Education. Berger will help ensure that the demands and responsibilities inherent in maintaining the accreditation of the residency and fellowship programs are met.

SMHS Physician Certified in Clinical Informatics

Kabir Yadav, M.D.C.M., M.S., M.S.H.S., associate professor of emergency medicine at GW’s School of Medicine and Health Sciences, was named as one of the first board-certified clinical informaticians in the country.

Physicians with this new board certification work as academic faculty, as chief medical information officers in health care organizations, as program managers supporting contractors in government agencies, and with software vendors of health information technology solutions.

“With health care reform, there is a need to measure quality, as well as compliance with certain goals and objectives, to provide quality care at a reasonable cost,” says Yadav. “Quality measurements, along with the government mandate for electronic medical records to have clinical decision support, have reinforced the need for physicians who specialize in informatics.”
Sustained Support from the Class of ’68
BY CHRISTIAN MYSLIWIEC

Class pride runs deep in the culture of GW, and the School of Medicine and Health Sciences (SMHS) Class of ’68 has a particularly good reason to be proud. To date, the class has donated more than $1.1 million to GW. That amounts to $23,900 a year, give or take.

While the total gift amount is impressive in and of itself, what makes this story even more remarkable is the class’ high participation rate. Among the 108 alumni, 90 percent have given to GW, totaling more than 1,400 gifts over the years. It’s proof that many small to moderate-sized gifts can be as significant as larger, but more scarce, donations.

Among the dedicated leaders of the class is cardiologist David B. Williams, M.D. After graduation, he served two years in the United States Air Force before accepting a position at Kaiser Foundation Hospital in California, where he served for 25 years.

“We have a class of great physicians who really appreciate GW, and want to maintain the quality of the school,” says Williams. He notes that everyone benefits by donating to GW – alumni help their own reputation by maintaining their alma mater’s prestige.

Another Class of ’68 alumnus is Allan W. Lohaus, M.D., who, following graduation and an internship, served two years of alternative services at an inner-city health center in Louisville, Ky. Later, he served a residency in OBGYN at Sinai Hospital in Baltimore and entered private practice in Columbia, Md.

For Lohaus, the class is dedicated to giving back because they’re so aware of all they have received through their SMHS education. The scholarships, loans, and employment opportunities that accompanied his GW education are things for which Lohaus is extremely grateful. He was able to attend GW thanks to a scholarship, and often designates his own gifts toward student scholarships. “I think the term is ‘pay it forward,’” he adds.

Like Williams, Lohaus has made a bequest intention to the school. “Part of my life’s success is because of my GW med school experience,” he says. “I want to acknowledge that in a significant way.”

While breaking a million dollars in donations is an incredible achievement, the class shows no sign of resting on its laurels. Both doctors have words of advice to their classmates on how to keep up the pace.

“I think you stay connected with GW and let that be your inspiration for giving,” says Lohaus.

SMHS Recognizes Alumnus Gerald Lazarus, M.D.

After nine years as a member of the George Washington University Board of Trustees, Gerald Lazarus, M.D. ’63, is stepping down, but the School of Medicine and Health Sciences (SMHS) won’t let him get away quietly. During this year’s SMHS M.D. Program graduation ceremony Jeffrey S. Akman, M.D. ’81, RESD ’85, Walter A. Bloedorn Professor of Administrative Medicine, vice president for health affairs, and dean of SMHS, will take a moment to recognize Lazarus for his years of service to the school and the university.

In addition to his service as a member of the board of trustees, Lazarus is a member of the SMHS Dean’s Council and the GW Alumni Association’s General Advisory Board, and he has served two stints on the SMHS Advisory Board, first from 2004 to 2008 and again from 2010 to present. Lazarus and his wife Audrey F. Jakubowski Lazarus, Ph.D., established the Lazarus Scholars in Health Care Delivery to support SMHS M.D. students as they pursue interests such as health care delivery systems, international health, and health care in the developing world.
Recently, Lazarus was selected by the American Skin Association to receive the 2014 David Martin Carter Mentor Award. The award was given for his ongoing contributions to the field and to American medicine. He also published a review on wound care treatments. Following a systematic review of 60 research papers on the treatment of skin ulcers, the study – funded through a $475,000 grant from the Agency for Healthcare Research and Quality – determined that most were so technically flawed that their results were unreliable.

Celebrating Service

GW School of Medicine and Health Sciences (SMHS) alumna Lara Oboler, M.D. ’95, member of the SMHS Dean’s Council, recently received the 2014 Alumni Outstanding Service Award.

Oboler was recognized for embodying the GW mission of enabling lifelong engagement, gathering a voice for alumni, and building a culture of philanthropy. Oboler has worked tirelessly to create an environment of shared ideas and networking opportunities among those in the SMHS alumni family and was the inspiration for the successful Women Physicians Networking Luncheons held in Washington, D.C., and New York City.

In 2012, Oboler and her husband, Louis Jaffe, established the H. George Mandel Endowed Memorial Scholarship, in memory of Oboler’s favorite professor. This need-based scholarship is given to students in their final semester, to be applied to their student loan debt. Oboler has also extended her support to young alumni and students through hosting New York alumni in her home each year since 2011.

Mitchell, M.D., RESD ’06, Named D.C. Chief Medical Examiner

Roger Mitchell, M.D., RESD ’06, was recently appointed by Mayor Vincent C. Gray, B.A. ’64, to serve as the new chief medical examiner for Washington, D.C. Mitchell, a board-certified forensic pathologist, was most recently the assistant state medical examiner for New Jersey. As head of the District’s Office of the Chief Medical Examiner, Mitchell will oversee the agency’s move toward accreditation under the National Association of Medical Examiners.

“We are very proud to attract a top-notch candidate such as Dr. Mitchell to head the Office of the Chief Medical Examiner,” says Gray. “Not only is Dr. Mitchell a product of Howard University who performed his residency at George Washington University, but he also previously trained at the D.C. Office of the Chief Medical Examiner and served as a DNA analyst at the FBI.”

In the Interest of Family Medicine

Seth Rosenblatt, M.D. ’14, M.P.H. ’07, has been named a regional coordinator for the American Academy of Family Physicians National Family Medicine Interest Group (FMIG) Network. Rosenblatt, who this spring matched in medicine–psychiatry at Charleston Area Medical Center, West Virginia University, will serve as a consultant and resource for the FMIGs on medical school campuses in the nine states – Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont, as well as Guam, Puerto Rico, and the Virgin Islands – that make up Region 4 of the network.

1960s

PETER RUNGE, M.D. ’65, was named chief of internal medicine at Sunnyview Hospital and Rehabilitation Center in Schenectady, N.Y.

1970s

ROGER J. FRIEDMAN, M.D. ’78, B.A. ’74, former part-time faculty member in the SMHS Department of Surgery, recently appeared in the latest edition of the publication The Leading Physicians of the World.

STUART S. KASSAN, M.D. ’72, medical director of the Infusion Center of Denver, and a physician with the Colorado Arthritis Associates, was appointed to serve as distinguished clinical professor of medicine at the University of Colorado School of Medicine, where he has been a member of the faculty since 1992.

WAYNE LEVIN, M.D. ’76, Trumbull resident and internist at St. Vincent’s Medical Center, was selected as the 2013 Physician of the Year as part of the St. Vincent de Paul Mission Award.

1980s


1990s

MITRA AYAZIFAR, M.D. ’97, joined the staff of NVISION Laser Eye Center in Sacramento, Calif.

GERALD T. GRANT, D.M.D., M.S. ’95, FACP, was confirmed as the Region 6 – federal services membership director of the American College of Prosthodontists (ACP) during the 43rd Annual Session of the ACP.
Class Notes

Joyce Lo, M.D. ’98, board-certified pediatrics physician, recently joined the staff at Silver Cross Hospital. Her office is located with Meridian Medical Associates in Joliet, Ill.

Joseph L. Perras, M.D. ’97, B.A. ’93, joined Mt. Ascutney Hospital and Health Center as director of hospitalist services.

Vanila Mathur Singh, M.D. ’97, associate clinical professor of anesthesiology and pain management at Stanford University Medical Center, is running for the Republican nomination for California’s 17th Congressional District.

2000s

Andrea I. Berg, M.D. ’06, was selected to serve as an assistant professor of medicine at State University of New York Upstate Medical University.

Mark Farmer, M.D. ’03, recently joined the medical staff at Beauregard Memorial Hospital, where he practices internal medicine, hematology, and medical oncology.

Neil Kelley, B.S. ’07, graduated as a doctor of veterinary medicine from the Virginia–Maryland Regional College of Veterinary Medicine at Virginia Tech.

Vivek Patil, M.D. ’09, B.S. ’05, co-founder of Radical Radiologist, a mobile social gaming platform for radiology education, was selected to present at Sinai Innovations at the Icahn School of Medicine.

In Memoriam

Orville Wright Donnelly, M.D. ’57, ResD ’59, M.A. ’51, former member of the internal medicine faculty at SMHS, died on March 28.

John T. Hagenbucher, M.D. ’57, ResD ’58, passed away Jan. 20. Hagenbucher, who practiced pulmonary and internal medicine in the Washington D.C. area for more than three decades, served as an assistant professor of clinical medicine at SMHS from 1964 until his retirement in the mid-2000s. During the Korean War, he earned a Bronze Star while serving in the Army Medical Corps.


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“As I enjoy retirement, I continue to reflect on GW - the place where it all started. Through my estate planning, I’m doing my part to ensure that the dream I lived can be realized by others in the future.” — George Ellis, M.D. ’56

Dr. Ellis is supporting the GW School of Medicine and Health Sciences with a gift of $100,000 through his IRA. His estate will receive a significant tax deduction and GW will receive the designated portion of his IRA tax-free.
New Beginnings and Future Goals

Spring is a season for new beginnings, and that has been true as ever at the GW School of Medicine and Health Sciences (SMHS). This year we have installed renowned HIV/AIDS researcher Douglas F. Nixon, M.D., Ph.D., as the Ross Professor of Basic Science Research and chair of the Department of Microbiology, Immunology, and Tropical Medicine. We celebrated the appointment of longtime SMHS leader Nancy Gaba, M.D. ’93, RESD ’97, FACOG, as the new Oscar I. and Mildred S. Dodek and Joan B. and Oscar I. Dodek Jr. Professor and chair of the Department of Obstetrics and Gynecology. We unveiled the newly renovated areas of Ross Hall, which include the state-of-the-art Clinical Learning And Simulation Skills Center and an array of new laboratories. And on the occasion of commencement, we celebrate the reason for all our endeavors, our graduates.

For the SMHS Class of 2014, their journey as students is over, and they now will make the leap from medical and graduate school to careers in health care. The magnitude of this transition cannot be underestimated; however, they will embark on this path armed with the extraordinary advantage of their GW education.

An excellent academic program is just one component of our four-part mission: to teach, to heal, to discover, and to serve. We are able to do these things, and do them well, thanks in ever-increasing measure to the philanthropic support of our alumni and friends. You are partners with us in this mission.

Philanthropy will be more vital than ever in the period to come. At SMHS, we are already working to secure the resources we need to propel us to our greatest potential. We are changing lives and changing medicine at GW. We invite you to become a part of our forward momentum, and learn more about our new beginnings and future goals.

Sincerely,

Dennis Narango, M.A., C.F.R.E.
Associate Dean, SMHS, and Associate Vice President for GW Medicine Development and Alumni Relations

Dean’s Council Members

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Allan B. Weingold, M.D., Obstetrics and Gynecology, Professor Emeritus, Former GW Chair of OB/GYN
Art B. Wong, M.D. ’67, Emergency Medicine, Founder, Emergency Physicians Group

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.
MAJOR LEAGUE

Keith Mortman, M.D., performs minimally invasive thoracic surgery using miniaturized instruments and a high-definition 3-D camera. Read more on page 18.