From the Battlefield to the Emergency Department
When I first entered New Jersey Medical School as a bright-eyed and eager student nearly five decades ago, women and people of color who pursued careers as physicians stood out; not just for their achievements but because there were so few of us. Thankfully, times have changed. Today, New Jersey Medical School’s student body is one of the most diverse in the U.S. What’s more, nearly half of the graduating Class of 2016 comprised women. Undeniably, our diversity—in backgrounds, in interests, in ideas, and in expertise—is the engine that drives our success as an institution.

This issue of Pulse magazine features a diverse array of clinicians, researchers, students, administrators, staff, and alumni who, through their accomplishments, show that mediocrity has no place in our organization. These individuals include our latest batch of Edward J. Ill Excellence in Medicine Award recipients—three exceptional women who have been recognized for their dedication to medical care, education, research and public service. Also featured is the NJMS student whose ascent to a leadership role in the Association of American Medical College’s Organization of Student Representatives signifies a first for our school. And, of course, we document on the pages that follow some of the ambitious initiatives that keep our school on the frontlines of scientific discovery, patient care and education.

I am reminded of the words of 20th century British Prime Minister Sir Winston Churchill, who said, “In the past we have had a light which flickered, in the present we have a light which flames, and in the future there will be a light which shines over all the land and sea.” Our light is shining brighter than ever at Rutgers New Jersey Medical School. It is a light that beckons people from all around the globe—as it did for me so long ago—to train, research, heal, and teach here. Indeed, our school is a beacon of the excellence that can be achieved when we all come together.

In health,

Robert L. Johnson, MD, FAAP’72
The Sharon and Joseph L. Muscarelle Endowed Dean
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Highly trained in bariatrics, this surgeon wanted more—so she “went back to school.” Now she’s taking minimally invasive surgery to a new level.

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Advocating for medically underserved children and fighting health disparities are part of alumnus Joseph Wright’s DNA.

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This NJMS alum served first his country, and now his patients, with the same dedication, enthusiasm, and compassion.

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A group of experts at New Jersey Medical School provides a collaborative approach to care that results in excellent outcomes.

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From tackling TB to fighting Crohn’s disease and the Zika virus, NJMS and GSBS scientists are making discoveries to improve human health.
Residents Publish Celiac Disease Study

As a resident in internal medicine at NJMS, Hyunseok Kim, MD, MPH, works around the clock. But he still finds a way to pursue his special interest in gastroenterology and nutrition, doing research on his own time. The physician recently published a study in the journal *JAMA Internal Medicine* about celiac disease and a gluten-free diet. Analyzing data from a national nutrition survey, Kim and his co-researchers found that although the prevalence of celiac disease has remained stable from 2009 to 2014, the number of people eating a gluten-free diet has more than tripled.

Gluten consumption has been identified as a risk factor in celiac disease, and the gluten-free diet is currently a nutritional trend. Kim's analysis has received widespread attention and he's been quoted in several journals and media outlets, including USA Today Online, theguardian.com, WebMD and MedicalResearch.com. With these findings, Kim received a Young Investigator Award from the American Gastroenterological Association at Digestive Disease Week 2016, the most prestigious gastroenterology meeting in the world, and an honorable mention award from the Johns Hopkins General Internal Medicine House-staff research competition.

“One possible reason for the increased popularity of gluten-free products is that consumers perceive them as being more healthy,” says Kim. “These products were once difficult to find but now they're widely available.” He adds that many people with self-diagnosed celiac disease report feeling better on a gluten-free diet, fueling debates on health benefits of gluten-free diets in the general population without celiac disease.

Kim plans to pursue a career in gastroenterology as a physician-scientist. His collaborators on the study include NJMS residents Kalpesh Patel, MD and Evan Orosz, MD, and faculty members Neil Kothari, MD, Michael Demyen, MD, Nikolaos Pyrsopoulos, MD, PhD, MBA, and Sushil Ahlawat, MD.

Students Share Experiences in New Literary Journal

*Ars Literarium* is a student-run literary journal featuring creative writing and artistic work of students and faculty at NJMS and other Rutgers schools. The journal includes short stories, poetry, digital photography and art, all with a focus on the art and science of medicine. The first issue was published in fall 2016 and is available online at njms.rutgers.edu/archives/docs/Ars_Literarium_2016_Volume_I.

The editorial team is now working on the second issue, to be published in spring 2017. It is co-edited by NJMS students Emily Moore and Shanen Mulles, and supported by advisors Beth Pletcher, MD, Andrew Berman, MD, and Tanya Norment, program administrator of the NJMS Center for Humanism and Medicine. “At the journal's core is the freedom to express our experiences, from the solitude of dawn before an early shift, to that sense of accomplishment after a difficult exam,” says Mulles.

“Collaboration makes *Ars Literarium* possible,” adds Moore. “The journal would not exist without our contributors.” For information about contributing to the journal, email ars.literarium@gmail.com.
Granick Named “Best Medical Practitioner—USA”

Mark Granick, MD, has been named “Best Medical Practitioner of the Year—USA” by Global Medical LiveWire Awards 2016. He is professor of surgery and chief of plastic surgery at NJMS and professor of surgery at Rutgers Robert Wood Johnson Medical School. Granick was recognized for his superior skills and knowledge in plastic surgery, particularly in the areas of surgical wound care and complex reconstructive surgery from injury and cancer. He was also cited for developing an outstanding plastic surgery residency program at NJMS, for his research in telemedicine, and for compassionate patient care. The Medical LiveWire Awards, based in Birmingham, UK, recognize excellence and innovation across the spectrum of medical specialties.

New Book Offers Insights Into Motivational Interviewing

“Motivational Interviewing for Clinical Practice,” by NJMS chair of psychiatry Petros Levounis, MD, MA, and colleagues, teaches readers how to use the critically important tool of motivational interviewing to promote health and well-being. The book presents the latest models and techniques that the authors have found helpful in their scholarship and clinical experience.

failure to adhere to recommended treatments is common across a wide range of illnesses—from hypertension and cardiovascular disease to psychiatric disorders, including addiction. The methods and skills of motivational interviewing can be applied to any health behavior, be it giving up alcohol or cigarettes, taking medication for hypertension or high cholesterol, or changing dietary and exercise habits.

A unique aspect of this book is that each chapter includes feedback from learners new to motivational interviewing. The authors asked six medical students from NJMS and Yale School of Medicine (the authors’ academic homes) to read a chapter and provide comments about what they think will be most useful in the future. “The student responses educated, surprised, and thoroughly delighted us and added a level of innovation to the book,” says Levounis. Leading the NJMS student group was second-year student Jose Medina, who you’ll read more about on page 11. The book is available through American Psychiatric Association Publishing.

Patel Named to National Leadership Position

NJMS faculty member Anuradha Patel, MD, has been appointed to the Physician Board at the American Health Council, a nonprofit organization dedicated to improving Americans’ physical and mental health. As a board member, she will share her expertise on pediatric anesthesia, neuromuscular disorders, and preoperative anxiety. Patel is an associate professor of anesthesia and clinical director and section chief of pediatric anesthesia. She became involved in the specialty because of her great interest in how children cope with illness and hospitalization. Among her many accomplishments, she serves as a role model for young physicians, including her own two children. A nationally recognized expert on neuromuscular disorders, she has served on a CDC expert panel on Duchenne muscular dystrophy. She is a recipient of an Arthur Kahn Memorial Award and a Golden Apple Teaching Award at NJMS.

RBHS to Host Women’s Leadership Conference

This event will bring together a diverse mix of successful women RBHS leaders who—by discussing their journey—will educate, inspire, and encourage attendees to reflect on their own goals as they strive to advance in their careers. Attendees will also network and develop their leadership potential through workshops and small group exercises.

Rutgers Business School • Piscataway, NJ
June 1, 2017
8:15 am–4 pm

For more info:
Dr. Sangeeta Lamba
lambasa@njms.rutgers.edu
Honored For Excellence in Medicine

BY TY BALDWIN

Three NJMS faculty—Chantal Brazeau, MD; Nancy Connell, PhD; and Maria Soto-Greene, MD—have been honored with the prestigious Edward J. Ill Excellence in Medicine Awards. Named for a New Jersey physician who was a pioneer in promoting continuing education for doctors, these awards recognize outstanding physicians and researchers who have made significant contributions to health care.

Brazeau, professor and interim chair of the Department of Family Medicine, was recognized with the Verice M. Mason Community Service Award, which she accepts on behalf of the Rutgers NJMS Student Family Health Care Center, (SFHCC), NJMS's student-run free clinic.

“It’s an honor to work with the students and to accept the award on behalf of the SFHCC,” Brazeau says.

The SFHCC celebrates its 50th anniversary in 2017, she adds, so it’s particularly meaningful to be recognized this year. “The last five years have been especially rewarding to me as an educator. In 2011, I led a grant application and we received a grant from the Health Resources and Services Administration to expand the SFHCC community experiences; this led to new outreaches to homeless shelters, new collaborations with other professions, and teaching students how to evaluate and improve the quality of care. I am also proud of developing peer-led reflection sessions, where small groups of students reflect about the care they deliver to patients, which I believe is an important part of their growth as physicians.”

Brazeau adds that NJMS has always been supportive of the SFHCC, “providing the space, clinical offices, and IT support. NJMS faculty supervise the students and every year both NJMS and the NJMS Alumni Association provide funding for clinic operations. We're really grateful for that.”

Connell, professor and director of the Center for BioDefense, Center for Emerging and Re-emerging Pathogens received the Outstanding Scientist Award. “I’m pleased that my laboratory and the scientists who work in it have been recognized for their hard work,” she says. “In addition, science policy has been an important part of my professional career, and the award’s acknowledgment of the effort required to create this second body of knowledge is gratifying.”

Connell was recently appointed a Jefferson Science Fellow at the National Academies for 2017–18. “In essence, I will serve as a translator of science to diplomats and non-scientists,” she says, adding that she’s delighted to add science policy to the Center for Emerging Pathogens’ “current strengths in antibiotic drug discovery, tuberculosis diagnosis and immunology, and mechanisms of antibiotic resistance.”

“Biotechnological innovations in genetics, nanotechnology, and other areas lead to advances to the field of health and welfare,” she adds, “yet many of these discoveries are accompanied by increased risk of harm to humans, animals, or the environment. Our work in the area of training young scientists in the Responsible Conduct of Research is an important contribution to the universal call for scientists to maintain awareness of the societal impact of their work.”

Connell goes on to say that “the role of NJMS researchers and clinicians in regional, national, and international tuberculosis control has meant that NJMS has been a

Continued on page 6
New Treatments for Opioid Addiction Show Promise

Addiction medicine expert Petros Levounis says a maintenance treatment that combines medication with behavioral treatment and recovery support gives patients the best chance of sustainable recovery.

BY PATTI VERBANAS

Every day, 91 Americans die from an opioid overdose. Across the U.S., physicians and legislators are ramping up efforts to stem the escalating heroin and prescription opioid addiction crisis. New Jersey Governor Chris Christie recently signed a bill requiring insurance companies to cover up to six months of inpatient and outpatient treatment for drug addiction and limit an opioid prescription to a five-day supply.

Petros Levounis, MD, professor and chair of the Department of Psychiatry at NJMS, answers questions about advancements in opioid treatment delivery methods and the most effective combination of therapies for recovery.

Where do we stand on new delivery methods of opioid addiction medication for improving recovery rates?

Traditionally, there were two main pharmacological approaches. We would prescribe agonist medications, like methadone, which activates the opioid system in a way similar to heroin or prescription opioids and allows the person to feel normal while reducing withdrawal symptoms. The other approach is an antagonist medication like naltrexone, which blocks the opioid systems and helps people manage their addiction by stopping them from feeling high if they take a problem drug.

Over the past several years, we’ve developed a third strategy, a partial agonist, buprenorphine, which combines the two approaches to help people reduce their dependence and curb withdrawal symptoms. The downside is that patients must take the medication—typically a tablet or a film placed under the tongue—every day. If they forget, they are at risk for withdrawal and relapse.

In an exciting development, the FDA recently approved buprenorphine implants for long-term maintenance. A small incision is made underneath the upper arm for four one-inch implants, providing a constant low-level dose of buprenorphine. After six months, the doctor assesses if another six-month dose is necessary. Eligible patients are those who are already stable on other forms of buprenorphine. I expect this treatment method will be accessible to our patients by this summer.

What other improvements of delivery are on the horizon?

Buprenorphine injections, which will be effective for two weeks to a month, are in clinical trial, but have not yet been approved by the FDA.

What medical challenges do these advances in delivery resolve?

Patient adherence to a pharmacological regimen is crucial to success—but it is the most challenging for practitioners to uphold.

When patients are ill, they readily accept medications. However, when they start to feel healthy, their inclination is to stop taking the medication. The implants allow the medication to do its job without people thinking about it, which substantially reduces the risk of relapse.

What is the most effective course of treatment for opioid use disorder?

Scientific evidence shows that a maintenance approach with medications used in combination with behavioral treatment and recovery support are more effective than detoxification programs aimed at abstinence. In fact, a vast majority of people who go through a detoxification program without continuing on with pharmacological treatment end up relapsing.

Going through detox only can be dangerous. What few people understand is that during detoxification the patient’s tolerance level to the opioids is reset. For example, heroin addicts know the exact dose they need to take each day to keep themselves from withdrawing or overdosing. If they go through detox, do not continue on with treatment and relapse, they likely will return to taking the same amount of heroin as before. However, because they have lost tolerance, that dose is now lethal.
A CLOSER LOOK AT THE NJMS ART SHOW

The Visual Arts Thrive at NJMS

At NJMS’s Sixth Annual National Arts Program Exhibit, some 100 artists proudly displayed their work, from paintings and sculptures to ceramics and quilts. Participating artists included Rutgers employees and family members as well as Rutgers Health Sciences Campus employees, students, alumni, and retirees. The art is on display in the lobby of the Medical Science Building on the Newark campus. Coordinator for the exhibit is Noreen Gomez.

key player in the gradual success in bringing TB rates under control in this country,” and adds that she and her colleagues continue to work hard in the international fight against TB. “The support NJMS has provided the TB community in Newark over the decades has had a measurable impact on the world’s ability to detect, diagnose, and treat TB.”

Soto-Greene received the Physician’s Award for her “dedication and extraordinary service to the profession and citizens of the state.” As vice dean and professor of medicine at NJMS, as well as director of the Hispanic Center for Excellence, she has earned a national reputation for her efforts to promote diversity and cultural competence among medical students, faculty, and staff.

“At the very core of being a physician,” she says, “is the social responsibility we must have to others. In medicine, we have come to appreciate that it is essential that we care for individuals and communities within the context of understanding their beliefs and traditions. For me, this award recognizes NJMS as a champion of diversity and inclusion with a special commitment to underserved and vulnerable populations.”

Soto-Greene, who came to NJMS as a medical student over three decades ago, credits the institution with changing her life and that of her family. “Without NJMS, I would never have considered a career in medicine,” she says. “I moved from growing up in poverty, being part of the uninsured, to being the first in my family to graduate high school, college, and then medical school. NJMS has not only fostered my own personal and professional growth, it also remains deeply committed to developing future generations who can care for, and also provide guidance to people like myself.”

Soto-Greene accepts the award “on behalf of the great faculty, students, residents, fellows, staff, and administrators who work tirelessly every day to make a difference in the lives of so many.”
5 Questions on the HPV Vaccine

Mark Einstein, MD, professor and chair of the NJMS Department of Obstetrics/Gynecology and Women’s Health, and assistant dean of the Clinical Research Unit, is a specialist in cervical and other gynecological cancers. According to the World Health Organization (WHO), infection with human papillomavirus (HPV) is needed for a woman to develop cervical cancer. HPV is also strongly associated with anal, vulva, vaginal and penile cancers. Einstein was an investigator on a number of HPV vaccine clinical trials and was on the guidelines writing group for the American Cancer Society and WHO. Cancer prevention via vaccine is a fairly new option in the medical world. Pulse magazine asked this specialist who should get this vaccine and how it works.

What is HPV?
HPV is a very common virus that alters the immune system to favor its own survival. There are about 150 known types. More than 80 percent of Americans will be infected with HPV in their lifetimes, but in most cases, it never causes symptoms or illness—and certainly not cancer in most people.

Persistent HPV—an infection that produces consecutive positive tests 12 months apart—may be worrisome because the chances of developing a clinically relevant disease are much higher when the virus persists.

Can HPV cause cancer?
Yes. There are 40 HPV types that infect the genital tract and can co-infect other areas. Essentially all cancers of the cervix are linked to HPV infection. HPV is also linked to cancers of the vagina and vulva in women; the penis in men; and the anus and back of the throat, tongue and tonsils, in men and women. HPV is generally transmitted through sexual contact.

Can we use this vaccine to prevent HPV infection?
Yes. Clinical trials show that all three available HPV vaccines (Cervarix®, Gardasil®, and Gardasil® 9) provide strong protection against new infections. They are particularly effective against HPV types 16 and 18, which cause about 70 percent of cervical cancers and some other HPV-associated cancers. Gardasil also prevents infection with HPV types 6 and 11, which cause most genital warts. Gardasil 9, the newest HPV vaccine, prevents infection with the same four HPV types plus five additional high-risk HPV types (31, 33, 45, 52, and 58) and is the preferred vaccine according to the CDC.

Who should be vaccinated?
All boys and girls ages 11 and 12 should be routinely vaccinated. The newest recommendation is for two vaccines given 12 months apart in girls and boys younger than age 15. The vaccines can be started as young as age 9; and can be administered to females between the ages of 13 and 26, and males, ages 13 to 21. It can also be given to males who have sex with other males, ages 22 to 26. The vaccine works only if given well before the HPV infection occurs. Pre-teens also get a better immune response. If someone has been exposed to the virus, it doesn’t work as well.

What can be done to increase the numbers of children and teens who get vaccinated?
In the U.S., six out of 10 girls and five out of 10 boys have started the vaccines. Some do not get more than one. This is a woefully low vaccination rate. Physicians say parental concerns about the vaccines’ effect on their teens’ sexual behavior and parents’ low perceived risk of HPV infection, particularly to boys, are major factors. Some parents see no direct benefit to their sons. Pediatricians and other practitioners who take care of young teens have been encouraging vaccination, but there is more work to be done. Since millions of doses have been administered worldwide, the novelty is not an issue any more. Multiple scientific organizations, such as the American Cancer Society, have initiated large HPV vaccine campaigns to encourage vaccination and help dispel myths.

Bonus Question: Is there anything new on the horizon?
Yes. I am the principal investigator of a team that is working on a National Cancer Institute (NCI)-funded study to block transmission of HPV during sexual activity with a personal lubricant called Divine 9®, made with natural seaweed extracts. NJMS and Albert Einstein College of Medicine will collaborate in the study. In prior laboratory studies conducted by NCI, this product was shown to be an effective HPV blocker. While the HPV vaccine is effective only in those 26 and younger, this is a new approach to prevent HPV infection in those of any age. Also, there are many new clinical trials investigating how to boost the immune system. If we can overcome the reasons why HPV evades the immune system, we might be able to stop the infection and the damage it causes.

For more information about the HPV study, contact Randall Teeter at rt502@njms.rutgers.edu.
Caring for the Medically Underserved

The Student Family Health Care Center provides the highest quality of health care to a community that needs it the most. **BY GENENE W. MORRIS**

**Newark—July 1967.** It was termed the “summer of discontent,” when civil discord gripped the city and unleashed an insurrection that produced some of that era’s most startling images of violence and destruction.

From this turmoil, known simply as the Newark Riots, arose an effort to help the city’s residents—a free clinic run by NJMS students. It would be the first of its kind in the nation, a place rooted in the community and grounded in the welfare of the medically underserved.

Fifty years later, the Student Family Health Care Center (SFHCC) offers a new tableau, one where students and low-income Newark residents work hand in hand to improve health outcomes. Like a favored quilt, the clinic has grown into something comfortable, warm and familiar.

Working under the supervision of board-certified physicians including faculty advisor Michael Gerstmann, MD, clinical assistant professor in the Department of Family Medicine, first- through fourth-year medical students run the free clinic, the oldest in the nation. A group of 20 to 25 students gather there Tuesday and Thursday evenings to meet with patients and fix what ails them.

As for the patients, Gerstmann says they appreciate knowing that there is a place where they can go to get free health services and medications from people who genuinely care about their well-being. “These are the people who have already fallen through the safety net,” he says. Many are the working poor who don’t qualify for Medicaid and who can’t afford insurance, he says, adding that without the clinic they wouldn’t get the continuity and quality of care that the clinic offers.

In all, about 120 students volunteer throughout the year to work at SFHCC or its satellite clinics at Fairmont Health Services, a homeless shelter in Newark, and Apostle’s House, a Newark shelter for women and their children.

For NJMS graduate David J. Cennimo, MD, who volunteered at the clinic all four of his years at the medical school and served as a director his senior year, the clinic instills a sense of responsibility. “It makes you accountable. I would go home and study and read about these patients, thinking, ‘Okay, I don’t want to suggest something wrong. I don’t want to make a mistake.’ I think I learned as much at the clinic as when I was on my clerkships.”

Now a member of the NJMS faculty, Cennimo also serves as an attending physician at the clinic, supervising the students who volunteer there, listening to them present their cases, and signing off on the patient care decisions they make. Cennimo says he makes it clear to the students, “These are your patients. We’re just advising you, so tell me, what do you want to do and why?”

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1. On clinic evenings, students assemble on the fourth floor of the Doctors’ Office Center on the NJMS campus.
2. The clinic’s multidisciplinary approach involves volunteers from other Rutgers schools, including the School of Dental Medicine, the Ernest Mario School of Pharmacy and GSBS.
• Meeting with patients, students get training in providing primary care services, taking patient histories, and managing diseases like hypertension and diabetes.

• SFHCC provides ancillary services patients need and link them with resources beyond those offered at the clinic, such as charity care or mental health assistance.

• Before the clinic’s start, students provide lectures covering primary care topics, including the latest guidelines on high blood pressure management and diabetes screening.

• Clinic patients understand the role they play in helping to teach the students, says faculty advisor Michael Gerstmann, MD (pictured). “The patients are very motivated to take care of their health and are invested in participating.”

• Opportunities are available for doctors to work with the students. “We are looking for additional attending physicians to volunteer one to two evenings a year,” says Gerstmann. Participants must be trained in Med/Peds, General Internal Medicine, Family Medicine, or Emergency Medicine.
Putting Heart Disease in Clearer Focus

BY MARYANN BRINLEY

Start with a computer science background. Add this technology-driven love of logic to a fascination with cardiology. “I always wanted to be a doctor,” explains Alfonso Waller, MD, “but it was in medical school when I rotated with a cardiologist that I became really inspired to understand the physiology of heart disease and want to visualize what is going on, whether it’s a problem with cardiac function or coronary anatomy.”

As director of advanced cardiac imaging at NJMS, Waller is bringing a comprehensive range of multi-modality imaging to cardiac patients. “We can go beyond what traditional imaging has allowed. For the patient, that means we select the optimal test to evaluate their cardiac condition and really see what is happening. We help guide and support all cardiac services: electrophysiology, interventional cardiology or cardiothoracic surgery.” He can do this seamlessly because he is board certified in seven areas — internal medicine, cardiovascular disease, echocardiography level III, nuclear cardiology level III, cardiovascular computed tomography level III, cardiovascular magnetic resonance level III, and vascular interpretation — and he works collaboratively with the Department of Radiology as well as the Department of Medicine, holding appointments in both.

A graduate of St. George’s Medical School, this assistant professor completed his residency at NJMS in 2009 and stayed three more years for a fellowship in cardiovascular diseases. Then he was off to Harvard Medical School’s Brigham and Women’s Hospital for two additional years for a fellowship in advanced cardiovascular imaging. When he returned to Newark in 2014 collaborating across department lines came natural. “As someone who had trained here, I was well aware that in the past, radiology and cardiology each had control of their respective modalities. But they were open to my coming and forming this bridge to build a real collaborative effort. It’s been mutually beneficial in terms of growing the quality and volume for everyone.” Patients are coming from across the state, as far south as Camden and, Waller reports, “Even cardiologists from Hackensack, who have their own local cardiac imaging programs, are referring patients here.”

Five different cardiac imaging options are available and in the past year several have received extensive equipment upgrades.

Echocardiography is a relatively inexpensive, portable way to take images of the heart right at the patient’s bedside. “You can do this quickly and get a real time assessment of left ventricular as well as valve function.” When someone is acutely ill and can’t be moved, the size and portability of the echo machine is critical. And just recently, his department has purchased 4-dimensional (4D) ultrasound machines capable of doing even more advanced imaging, enabling physicians to identify conditions at earlier stages and with greater accuracy.

Nuclear imaging is a very helpful diagnostic tool, he explains, “because you can look at myocardial ischemia. In addition, our lab can image obese patients, perform MIBG imaging, and evaluate for different kinds of infiltrative diseases like amyloidosis.”

PET, or positron emission tomography, is used to assess myocardial viability as well as look for infiltrative diseases like sarcoidosis.

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NJMS Student Leads the Way at AAMC

By Mary Ann LitteLL

With a healthy streak of activism, tempered by a keen interest in helping others, it’s totally in Jose Medina’s character to be a change agent. Trained in social work and bioethics, the second-year NJMS student—who was recently elected to the Association of American Medical Colleges as a student delegate—has his sight on specializing in family medicine so he can provide health care to those in need.

“I believe a strong factor in swaying fellow representatives to vote for me was my background in social work and my role here at New Jersey Medical School creating informal learning opportunities, via the Humanism Center, for topics related to health and humanism in medicine,” said Medina, who as a delegate to the northeast region of the AAMC’s Organization of Student Representatives, is the first NJMS student to hold a national leadership position. “I’m excited about this opportunity to connect with other students and learn about innovations and best practices at other medical schools.”

Medina was born in Miami. His parents, Cuban émigrés, came to the U.S. in the late 1960s to escape the Castro regime. They first settled in New Jersey, later relocating to the vibrant Cuban community in Miami, where they operated a traditional Cuban bakery. His dad, a food scientist, had worked for Entenmann’s, the large commercial baker. “He knows how to do all kinds of food-related things and that includes mass-producing baked goods,” explains Medina. “I pretty much grew up in the bakery and learned to bake alongside my parents. Everyone loves my pumpkin cheesecake.”

Medina has always been interested in a career in health care, but took a roundabout route to medical school. He obtained his undergraduate degree in public health at Johns Hopkins University, where many of his fellow students aspired to become physicians. There he became involved in 4K for Cancer, an annual cross-country bike trip (Baltimore to San Francisco) to raise money for cancer research. An avid biker, he was the ride’s tour director in 2010, leading a group of 28 bikers across country, raising more than $120,000. “The trip takes two months,” he says. “We slept in schools, churches, YMCAs and even outdoors, once we got to the desert. Along the way we did some education and fundraising. It was a life-changing experience.”

Nearing graduation, he’d almost finished his medical school applications but decided to go in a different direction. “Hopkins gave
How to Succeed in Surgery if You Are a Woman

BY MARYANN BRINLEY

When Christine Laronga became president of the Association of Women Surgeons (AWS) last December, she was thrilled. After all, this organization has given her tools to succeed in a male-dominated field. “I joined AWS for the three ships,” she laughs. “Mentorship because I was young at first, friendship because AWS is a wonderful way for a woman to not feel alone, and now leadership. This is my opportunity to give back.” But there was someone else in the audience, a mentor from her years of training in New Jersey, who was probably just as thrilled.

“How honestly, when I saw Irene Wapnir there at the ceremony, I cried,” Laronga admits. “I didn’t expect her to be there. If it weren’t for her, I would have given up surgery. I would have been too afraid.”

A surgeon at Moffitt Cancer Center and Research Institute in Tampa, FL and professor in the Department of Oncologic Sciences as well as Surgery in the College of Medicine at University of Florida, Laronga treats and researches all breast disease. This single mother of two daughters and pioneer in nipple and skin-sparing mastectomy goes more than the ordinary distance in everything she touches professionally and personally. Her CV is miles of pages long. Her twitters and blogs of advice on how to succeed are thought-provoking and heartfelt. You come away from interacting with this doctor in awe. Yet, her career might have stalled without the push from Irene Wapnir, MD, a professor of surgery at Stanford University Medical Center.

“You might ask, ‘Well, what did she do that had such a profound effect?’” Laronga explains. In the ER one night in New Brunswick, Laronga, then a surgical intern, got the call that a trauma patient was coming in. It had taken the emergency crew 45 minutes to extricate the individual, who was hit by a drunk driver. Working in trauma requires a certain amount of dispassionate distance. So, “The attending physician said to me, ‘This person is probably dead because it’s been too long. When they get here, cut off the clothes, put the EKG monitor on.’” She remembers saying, “Ok. I can do that.” Minutes later, after cutting off the man’s leather jacket, she was shocked to see that he was wearing the hospital’s scrubs. “I looked at his face and realized it was the chief resident in orthopedics. Oh my God. I had just been talking to him. He had just left the hospital that night after tending to a boy’s broken leg. He asked me to call him when the OR was ready.”

Emotions ran high. Just as they would for any patient coming into the ER, the team tried everything. They even performed open heart massage in the OR. He died and the very personal nature of the experience rocked her world. “I was just devastated. Every time I got close to the operating room afterward, I got afraid.” So Irene Wapnir put the young intern on her service. “Little by little, she brought me closer to surgery again. She’d have me watch. I’d sit in the corner of the OR. She’d say, ‘When you are ready, I’m ready.’” Within weeks Christine Laronga would be ready to resume her life of becoming a surgeon and be forever grateful to her first surgical mentor.

This critical lesson in mentoring—and the importance of women supporting other women—has stayed with her. After medical school at NJMS and residency at Rutgers Robert Wood Johnson Medical School, Laronga completed a fellowship at M.D. Anderson Cancer Center in Houston in 2000. As a surgical oncologist, she is able to...
Laronga was drawn to breast surgical oncology because it felt as natural “as salmon swimming upstream. I’ve always been interested in arts and crafts, even as a little girl. And there is no doubt that surgeons are artists.”

reviewing all the pathology results, looking at the technical feasibility and getting a lot of input from the plastic surgery team.” That first nipple-sparing operation was a success.

At a national meeting of the Society of Surgical Oncology, she presented on the feasibility of nipple-sparing surgery and how often historically the bottom of the nipple was involved in occult cancer. “I can still envision it,” she laughs. “The moderator was a famous surgical oncologist. He was a giant in the field and the room was silent when I finished.” He turned to the audience before anyone could ask questions. “Now hold on. I just want to say that Dr. Laronga is presenting on behalf of her compatriots at M.D. Anderson and her opinion does not represent the opinion of this society.” This was 18 years ago but she still smiles reliving the experience. “What we were doing was so new, so investigational and so provocative. But there were brave people in the audience who started trying it.” By 2004, research papers heralded five years’ worth of surgical success stories.

“What really has me on fire now,” she says, is a new project focusing on women who are genetic carriers of breast cancer. The study will investigate natural approaches—eating blueberries, for instance—and vaccines to prevent cancer in this vulnerable group. “I see a lot of women who are afraid but aren’t ready to have their breasts removed at age 25 or don’t want to take prevention drugs that have significant side effects. So we will be looking at safe, tolerable and effective alternatives to reducing their risk.”

Though she dismisses her ability to balance a very busy life as a “work in progress,” you can’t help but see how this woman has always juggled masterfully. She would cook for study sessions in her home during residency. She’d crochet baby blankets during trauma rotations because her chief was pregnant and breaking workplace stereotypes. She’s planning to bring her teenage daughter along to next week’s conference so they’ll have time together. She’s on a social media mission to tweet something empowering every single day of 2017. “It’s making me reflect, giving me mindfulness and strength.

“Few people can be the best at everything, so whatever you are doing at that moment, be in that moment,” she says. “When I’m at work, I try to be the best surgeon I can be. When I’m at home, I try to be the best mother I can be. I may not be the best at any of it, but I’m giving it my best.”

For more about the Association of Women Surgeons, go to: www.WomenSurgeons.org To follow Christine Laronga on twitter: @clarongamd

Heart Disease

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“We actually have a multidisciplinary sarcoidosis center here,” Waller explains. Much about this disease is unknown and it can affect multiple areas of the body, including the skin, lungs, and the heart. “We have patients who come from all over for evaluation.”

Cardiac CT, including coronary angiography and calcium scoring, “is very good when looking at anatomy of the heart, cardiac chambers or cardiac valves,” Waller says. “We have just installed new scanners and technology which offers state-of-the-art imaging.” In addition, the CT lab can do vascular CT angiography.

Cardiac MRI (magnetic resonance imaging) is best used when “assessing the myocardium, ventricular size and function, and valvular function,” Waller says. “We can look for areas of scarring, infiltration or infection with MRI, which is way beyond what traditional imaging would have allowed.”

As one of a generation of young physicians who are unafraid to break traditions or jump intellectual hurdles, Waller credits his superiors: Marc Klapholz, MD, professor and chair, Department of Medicine and Sohail Contractor, MBB, professor and chair, Department of Radiology. “They have both been so supportive of this program. What is most rewarding now is being able to teach future doctors and work at a center that provides high quality patient care in such a collaborative environment.”
When Rabbi Max Kirshblum spoke, people listened, especially his grandson Steven, who, like so many others, revered the world leader and public speaker. So, when the young Kirshblum began considering a career in medicine, his grandfather issued an entreaty that would serve as the guiding principle behind every professional decision he would make from that moment on. “I remember his words: ‘If you’re going to pursue medicine, commit to a field where you’re caring for people who otherwise aren’t being helped,’” Kirshblum says.

It was an appeal that would ultimately lead Steven Kirshblum, MD, to the field of physical medicine and rehabilitation. “During my medical school clinical rotations and experience, I realized that people with physical challenges and disabilities seemed to be lacking the access to the level of care they needed,” Kirshblum says, adding that through physiatry, “I found myself fulfilled and meeting the mission that my grandfather set out for me.”

This “mission” has served Kirshblum well, steering him in directions that would eventually result in his earning recognition at the highest echelons of his field. In fact, in January, following a nationwide search, Kirshblum was named the new chair of Rutgers New Jersey Medical School’s Department of Physical Medicine and Rehabilitation (PM&R).

As the new chair, Kirshblum plans to build on the strength of an already widely respected department by focusing on the rehabilitation needs and health of communities; collaborating with other health care disciplines; advancing rehabilitation research;
providing innovative medical student and resident training experiences; and developing strong patient and field advocacy.

While other specialties handle specific organs—for instance, dermatologists treat skin disorders; neurologists manage the nervous system; and orthopedists repair bones—physiatrists take care of the entire person, Kirshblum explains. “Our doctors don’t just mend the broken bones per se; they heal the broken spirit.”

Kirshblum’s appointment as chair portends the long-standing partnerships that the medical school has with Kessler Institute for Rehabilitation, Kessler Foundation, both in West Orange, NJ, and Newark’s University Hospital.

“A primary goal is to expand the scope of our services strategically, with understanding and compassion. We will leverage our skills and commitment to excellence to provide the finest patient care, research, and education,” Kirshblum says.

A staff member of Kessler and NJMS since 1990, Kirshblum serves as the senior medical officer at Kessler Institute and as director of the spinal cord injury (SCI) program there. He is also the chief medical officer at Kessler Foundation and chief of service at University Hospital. Additionally, he serves as chief academic officer to the inpatient rehabilitation hospital division of Select Medical, Kessler Institute’s parent organization.

“Given that the missions of these institutions are very similar, our collaboration works smoothly and effectively. I think the value of my roles within each of these organizations will help support the synergies that exist and continue to strengthen our relationship,” Kirshblum says.

Kirshblum notes that his mentors—including former PM&R chair Joel DeLisa, MD, and Bruce Gans, MD, chief medical officer for Kessler Institute, as well as Kristjan Ragnarsson, MD, and Jerry Weissman, MD, former chair and former residency program director, respectively, with Mount Sinai Medical Center—encouraged him to not only be futuristic in his thinking but to lead by example. Furthermore, from them, he gleaned the importance of active involvement and advocacy within his field.

At the national level, Kirshblum served as president of the American Paraplegia Society and the Academy of Spinal Cord Injury Professionals (ASCI) and currently sits on the Board of Directors of the American Spinal Injury Association (ASIA). A widely sought-after speaker, Kirshblum has delivered hundreds of lectures and presentations at meetings and conferences around the world. He has received numerous awards for his research and leadership, most recently earning the Sell Lectureship at the annual ASIA conference; the Leadership Award from ASCI; and the Distinguished Academician Award from the Association of Academic Physiatrists.

A graduate of New Jersey’s Fairleigh Dickinson University and the University of Health Sciences/Chicago Medical School, the Brooklyn native is also a prolific writer, having served as editor of two textbooks and authoring more than 140 peer-reviewed publications, 45 book chapters, and a children’s book on spinal cord injury. Kirshblum even appeared in the Academy Award-nominated documentary Murderball, which follows the U.S. Wheelchair Rugby Team in its quest to win gold during the 2004 Paralympics.

But of all his many achievements, Kirshblum ranks his family as the most meaningful to him. His wife Anna, a social worker; their three children, Aryeh, Rena and Max; daughter-in-law Sepha; son-in-law Jonathan; and grandchild Tani are his top priority. “If we’re fortunate, we may earn recognition and respect for our work, but our greatest accomplishment — our legacy — comes from our families.” That’s a sentiment to which Kirshblum’s grandfather most certainly would have subscribed. ●

Medina

Continued from page 11

me a great education and opened my eyes to all the different options open to me, and not just medicine,” he says. “I wanted to take some time to explore them.”

He signed on with the nonprofit organization WorldTeach, which sends volunteer teachers to developing countries, and traveled to Guyana to teach math and science to high school students. “Guyana is a community-minded society and I fell in love with it,” he says. “But there’s also great poverty. I experienced what happens when safety net systems don’t exist, and it made me even more interested in social work.”

After a year he returned to the U.S. to complete a Master of Social Work and a Master of Bioethics at the University of Pennsylvania. His training included the full range of social work experiences, including a stint supervising community health workers. Working with individuals with high rates of illness and hospital readmission rekindled his desire to become a physician, so he applied to NJMS as an early decision candidate.

Medina was well acquainted with NJMS because his wife, Ellina Hattar-Medina, is a 2016 graduate. The two met as undergraduates at Johns Hopkins. She’s currently a resident in neurosurgery at Thomas Jefferson University Hospital in Philadelphia. Drawn to NJMS because of its commitment to community engagement, he volunteers with the Department of Family Medicine’s Student Family Health Care Center and is a fellow at the Healthcare Foundation Center for Humanism and Medicine.

Medina’s vision for the future includes specializing in family medicine so he can provide health care to the full spectrum of those in need. “With the tremendous shortage of basic primary care in our country, many people lack access to health care,” he says. “These are the communities I want to serve, whether it’s through practicing medicine, working for a state or city health department, or being involved in policy.”
Subhashini Ayloo, MD (front), associate professor of surgery and director of robotic and minimally invasive HPB surgery, with residents training to do HPB surgery minimally invasively: (left to right) Dhaval Chauhan, MD, David Palange, MD, and Neil King, MD.
Meet Subhashini Ayloo, MD, the newest member of Rutgers New Jersey Medical School’s liver transplant team. What makes her exceptional is the number and complexity of specialties she’s mastered. Early on she trained in minimally invasive surgery (MIS), but wanted to apply these skills more broadly. So she “went back to school” and learned another specialty, and then another. And then she wove them all together to create a brand of medicine that’s uniquely her own.

Consider her skill set: She’s a liver transplant surgeon, and also trained in hepato-pancreato-biliary (HPB) surgery. Taking this one step further, she is one of a small number of surgeons doing HPB procedures minimally invasively. She is also an expert in bariatric surgery, procedures for weight loss. In 2012 she and a colleague at the University of Illinois Hospital were the first in the world to perform a simultaneous robotic kidney transplant and gastric sleeve surgery, an event covered in many journals.

When asked what brought her from Illinois to the Garden State, she smiles. “I learned about NJMS from Pulse magazine. I thought, ‘That’s the place for me,’ and made a connection. And here I am!”

Ayloo joined NJMS in July 2016 with several goals, one of them to grow a clinical practice combining bariatric surgery and liver transplantation as an effective treatment to address the challenge of obesity in liver failure patients. “Many obese patients are excluded from lifesaving transplant and are less likely to receive the organs they need,” says Ayloo. “They’re told to lose weight first—very difficult when you’re fighting chronic disease. Instead of declining them, we want to find alternative strategies to address organ failure and obesity.”

Not long ago Ayloo headed a busy bariatric surgery program at the University of Illinois at Chicago. The work was rewarding but she wanted more. “I’ve always been interested in transplant, so I decided to combine bariatrics, liver transplant and HPB. My spin on this is bringing MIS techniques to HPB surgery, which is traditionally performed as open procedures. Few centers offer this.”

She adds: “Bariatric and general surgery has led the way in using MIS techniques, which streamlined procedures and made them safer. However, minimally invasive approaches to liver, bile duct, and pancreatic surgery are being adopted more slowly, due to the complexity of these procedures. This was a logical next step in my training.”

In 2015 she completed a two-year fellowship at Canada’s Dalhousie University combining liver transplantation and HPB surgery. In addition to transplants, Ayloo performs liver resections for cancer or benign lesions, treatment for cancers of the pancreas and the biliary duct, removal of biliary stones lodged in the common bile duct, and more.

NJMS came onto her radar when she read an article in Pulse about Anne Mosenthal, MD, chair of surgery. “There are so few women surgery chairs. I was inspired by how she broke that glass ceiling,” says Ayloo. “I emailed her and that started a conversation.” Mosenthal put Ayloo in touch with Baburao Koneru, MD, professor of surgery and chief of the Division of Liver Transplant and Hepato-Pancreato-Biliary Surgery, who offered her a position.

“Dr. Ayloo brings superb skills in robotic and minimally invasive abdominal surgery, especially in the area of liver, bile duct, pancreas and stomach,” says Koneru. “This has tremendous potential to improve patient safety and comfort outcomes. Her technical and teaching skills will also be of immense benefit to the trainees in the Department of Surgery at Rutgers.”

The NJMS surgical residents assist in all of Ayloo’s procedures. “These techniques are our future so I want to share all I can with the residents,” she says. “Not many academic health centers offer training in minimally invasive HPB surgery.”

One of Ayloo’s first patients since coming to NJMS is 68-year-old Sai Mai, who was diagnosed with liver cancer caused by hepatitis B infection. Mai is originally from Vietnam and hepatitis B is widespread throughout Asia. She was referred to Koneru for treatment. He told her the cancer had to be removed and proposed a robotic procedure, to be performed by his new colleague. “The location of the tumor and its proximity to major blood vessels are factors we consider when deciding whether robotic surgery is feasible,” explains Ayloo. “In this patient’s case, it was.”

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A Career Shaped by Social Consciousness

BY GENENE W. MORRIS

ack when HIV/AIDS was still called gay-related immune deficiency—or GRID—pediatric resident Joseph Wright, MD’83, MPH, fresh out of medical school, came across a case in the emergency department at Children’s National Medical Center in Washington, DC, involving a child with pneumonia. It perplexed most of his colleagues, but Wright—an NJMS graduate who, just weeks before, was training under the celebrated James Oleske, MD’71, a pioneer in pediatric AIDS research and care—had a strong sense of what was going on with the sickly patient. Then an intern, Wright shared his suspicions that the baby had pneumocystis pneumonia associated with GRID. It was a diagnosis that would soon be confirmed and that would begin the Brooklyn native’s illustrious career at the medical center.

“Everyone was amazed,” he says.

Everyone, that is, except Wright, who explained to the others, “You don’t understand. Literally, last month I was taking care of a kid just like this one with Dr. Oleske.”

Having trained in Newark, Wright says, “I was equipped with knowledge and skilled with procedures. One thing coming through New Jersey Medical School, you were prepared. So, when I got to DC, I was able to hit the ground running and keep the momentum going for the three years of my training.”

At the end of his residency, Wright received the Dr. Maynard J. Cohen Memorial Award, “For Intense Interest, Diligence and Excellence of Judgment in the Care of the Pediatric Patient” at Children’s National, which was bestowed by his fellow residents. It’s an honor that Wright still regards as a crowning achievement. “Of all the accomplishments over the years, I cherish that one the most. (Residency) is the most intense period of any medical professional’s life and to be able to come through it with the respect of my peers,” Wright says, “I owe that directly to the training I received from those folks at New Jersey Medical School.”

That’s saying a lot, considering that Wright has spent the decades since his days as a resident building an impressive list of achievements befitting an eminent physician, educator, administrator and advocate.

A fellow of the American Academy of Pediatrics, Wright worked as the senior vice president for community affairs at the very medical center where he trained, before joining Howard University College of Medicine in June 2014 as the chairman of the school’s Department of Pediatrics and Child Health. Board certified in pediatrics and specializing in pediatric emergency medicine, he was elected to the American Pediatric Society—the oldest honorary society in North America—where he serves on its Committee on Diversity and Inclusion. Wright also chairs the AAP’s Committee on Emergency Medicine, which is responsible for developing policies pertaining to the emergency care of children. He also serves as the principal investigator of the DC–Baltimore Research Center on Child Health Disparities, a National Institutes of Health-funded center of excellence that is the only one in the country exclusively focused on health disparities in children. Wright is a recognized expert on issues relating to bullying and adolescent violence. He has testified before Congress and, most recently, spoken at the White House.

Of his experience speaking at the White House, Wright, a consummate educator, says that while he was “honored and very humbled to have had the opportunity…at the end of the day it really boiled down to leveraging my subject matter expertise for the benefit of others…I’ve been in Washington a long time and don’t take these opportunities for granted. But, at the same time, we have an obligation to educate people outside our immediate choir.”

Wright credits a lot of his professional decisions to the guidance he received from his mentors in Newark. They include New Jersey Medical School’s Dean Robert Johnson, MD,’72; professors of pediatrics Paulette Stanford, MD’75; and James Oleske, MD’71; as well as former Department of Pediatrics Chairman Kendall Sprott, MD’77, JD; and the late Lonnie Wright (no relation). In actuality, he says, his decision to go into pediatrics in the first place and to ultimately earn a master’s degree in public health, stems from his interactions with Johnson, who, long before becoming the dean of the medical school, served as Wright’s advisor. “In fact, I reached out
to Dr. Johnson when this opportunity (at Howard) was afforded to me," Wright says.

His current role as pediatrics chairman is a “professional breath of fresh air,” Wright says, in that it grants him the chance to offer the same level of career guidance and support to Howard medical students that he got from his NJMS mentors. “Howard has a much smaller Department of Pediatrics, which has really allowed me to be very close to the students. I spend a lot of time meeting with them around their career choices.” In that regard, he says, he’s made great strides, noting that since his tenure at Howard began “we’ve had very good success…with about 10 to 12 percent of the (graduating) class of medical students actually choosing pediatrics and going to very fine programs all across the country.”

Each time Wright walks into his office, he is greeted by portraits of “giants” in pediatric medicine. These esteemed figures—Roland B. Scott, MD, who the New York Times called “an authority on sickle cell disease and a champion in the fight against it…” and Renee R. Jenkins, MD, the first African American to be elected as the president of the American Academy of Pediatrics, among others—once held the position that Wright holds now at Howard and remind him of the magnitude of his role.

“I have a deep respect for the history of Howard University and the College of Medicine, specifically,” says Wright, adding that there’s a social consciousness at Howard—which prides itself on training students to become competent and compassionate physicians who provide health care in medically underserved communities—that calls to mind his days at New Jersey Medical School. That’s something that he wants to see his students include in their professional armamentarium.

“I feel that social consciousness has been incorporated into my professional DNA,” Wright says. “It has shaped virtually everything that I have done and I realize, in retrospect, it’s almost like coming full circle because many of the exposures and opportunities that were afforded me at New Jersey Medical School are definitely coming back to shape my leadership walk here at Howard at the backend of my career.”

In August 2016 Mai underwent liver resection: removal of the portion of the liver containing the tumor. “We removed a 4 centimeter lesion with a few small incisions,” says Ayloo. “She stayed in the hospital for one day, as opposed to the four- or five-day hospitalization typical in open surgery.” Other advantages of MIS include less pain and less likelihood of infection. Mai also had cirrhosis, which commonly accompanies hepatitis B and put her at increased risk for bleeding. She was monitored closely and fortunately had no complications.

Says Mai’s daughter, Thuy Nguyen: “My mother recovered quickly from this surgery, with minimal pain. She’s doing so well that she was able to travel to Vietnam to visit family.”

“While this procedure showcases our state-of-the-art treatment for liver cancer, we do the entire spectrum of care, benign or malignant,” says Ayloo. She cites a second patient: 27 year old teacher Alixandra Hrizuk, who had a 12 centimeter hepatic adenoma, a benign tumor possibly caused by oral contraceptives.

Hrizuk was offered the option of observing the tumor for a few months or removing it minimally invasively. She opted for removal because she and her husband are considering starting a family. The surgery was performed on in mid-December 2016. “I was terrified by the thought of having surgery, but I needn’t have been,” says Hrizuk. “I went home in one day and had only minimal pain. I was able to enjoy the holiday season with no restrictions and barely missed a day of work.”

A third patient, Haydee Quiliche, had gall bladder removal at another institution. She subsequently developed cholangitis, a bile duct infection, caused by a stone lodged in her duct, and came to Newark’s University Hospital, NJMS’s primary teaching hospital. Physicians tried to remove the stone endoscopically, placing a thin tube down the throat into the stomach. However, the patient’s prior stomach surgery had changed her anatomy and the stone could not be retrieved with the endoscope. So Ayloo was called in and removed the stone robotically.

“The endoscope is a wonderful tool but it can’t do everything, so we stepped in,” says Ayloo. “This patient did well. She had a fast recovery and didn’t require a long hospital stay.”

She adds: “One thing we know — when all else fails, surgery comes to the rescue. When we can do that surgery minimally invasively, it’s an added plus for the patient.”
It was September 11, 2001, just a few weeks into his first year of medical school. Gregory Sugalski, MD’05, was fulfilling a lifelong dream. “My mom says that I only ever talked about being one thing in life: a doctor. I loved playing with my Fisher Price toy doctor’s kit. As far as I can remember, there was no other goal for me. I went on a straight shot through college and into medical school.” And on this particular morning—one that would add a new direction to the course of his career—he was sitting in a lecture hall. “I remember it as clearly as if it were yesterday.”

Sugalski, vice chair of clinical operations and medical director of Emergency Medical Services at University Hospital, can still picture the physician from the dean’s office who came in to alert students and staff to the news that a small plane had crashed into the World Trade Center. Minutes later, she stepped in a second time to tell everyone to go home. It was more than just a small plane. “I lived in Hoboken at the time. It was a tough place to be then. So many people were killed in the towers,” Sugalski recalls. “I ended up losing a good friend that day.”

Growing up in Oradell in Bergen County, he “had no experience with military life and in the northeast, you don’t really interface with anyone else who does.” But the terrorists’ attack that 9-11 morning, “propelled me into military service. I signed up and actually got sworn in a few days later.” By obtaining a deferment to finish medical school and do his residency in a civilian environment, he was able to complete his education and training in emergency medicine at NJMS before leaving for active duty in the Army, stationed at Brooke Army Medical Center at Fort Sam Houston, Texas.

Sugalski, who left active military service in 2013 as a major, served in Iraq in 2010 and Afghanistan in 2012. My family and girlfriend, Rachel, who became my fiancé and then my wife, all had to deal with my decision. They were frightened. On his first overseas deployment, Sugalski wasn’t a father yet. The second time, I left my wife and my son Harrison. I missed Harry learning how to walk and talk and that was so hard.”

But the people, places, and lessons learned while providing trauma care on the battlefield have given him a rich, experienced wisdom that he brings to his care of patients now. “I have so many memories.” In Baghdad at the height of the U.S. occupation and the surge in Iraq, Sugalski was in a combat zone surrounded by 100,000 troops. “But we didn’t see a lot of trauma. We were situated next to the detainee center so I took care of chronic conditions like hypertension, heart disease, and stroke in Sadaam Hussein’s former cabinet members.” Later in Afghanistan, stationed “about 30 miles from where they killed Osama Bin Laden, right along the Pakistani border, we provided care to about 1,500 troops, and not only the 101st Airborne soldiers but also our partners on the Afghani side, their border patrol, and their army. Some of the most gratifying times involved my partnering with the Afghani physicians.” Sugalski helped these medical colleagues become more skilled in things like basic resuscitation. He taught them how to use diagnostic ultrasound.

Still in touch with those Afghan doctors, he recalls one in particular: Dr. Yousef was “there on day one of the war in 2001, at what was then called Forward Operating Base Chapman, named after the very first U.S. casualty of the war. Yousef is an amazing guy who would drive three miles from his base to ours every day. That doesn’t sound very far, but...”
but in hostile territory, it’s a very long three miles. He’s an incredible
guy who had a $50,000 bounty on his head from the Taliban because
of his working with us. Thank God he was able to come to this country
last year and is in Texas now.”

Discharged from active duty in 2013, Sugalski could imagine no
better place to bring his medical experience than back to Newark. “My
heart has always been here.”

His “Combat Casualty Course,” a lecture for residents, draws on
his military training and has also become popular in the Mini-Med
program. “We just started a new course called the ‘Urgent Care
Experience,’ which offers hands-on patient training for students. They
love this. They eat it up. It’s amazing to picture myself back then.”

His role as vice chair of clinical operations puts him in charge of “the
nuts and bolts” of keeping the hospital Emergency Department gears
moving throughout the day, including policies, procedures, making
rounds, and checking on issues. “We are super focused on the flow of
patients through the Emergency Department right now. We want to
cut wait times while still providing quality care,” he says.

At work every morning by 7, Sugalski is still clinically active.
Looking back, he recalls the clinical crisis brought on by the Ebola
epidemic in 2014. National and local fears that this deadly virus would
enter the U.S put his team front and center in Newark. “We saw more
potential Ebola patients than any other place in the country,” he recalls,
“for almost a year. Most people don’t know this.” Both the Centers for
Disease Control and the World Health Organization concurred after
on-site visits that his extended treatment area with its isolation tents,
separate lab, radiology equipment, and command center—“still open
and ready for the next infectious disease outbreak”—was the model for
the rest of the country’s hospitals. “We published an article in a medical
journal, ‘Development and Use of Mobile Containment Units for the
Evaluation and Treatment of Potential Ebola Virus Disease Patients in
a United States Hospital’ about it.”

What makes him smile these days is his role as team physician for the
New Jersey Devils ice hockey team. “It’s been great to expose people to
what emergency physicians can do because this is still a young specialty,”
he explains. In 2015, the National Hockey League started requiring
teams to have an emergency physician on staff. As Sugalski says, “It was
good fortune that we are just a mile and a half up the street from the
Prudential Center,” home of the Devils. “We are responsible for all the
on-ice emergencies for both the home and visiting teams, referees, and
coaches. Luckily, we don’t take care of rowdy fans,” he laughs.

Earlier this season, he provided care to an injured player right on the
ice. “I shuffled out and didn’t fall,” Sugalski says, “I can’t skate.” His son
Harry now wants to be an ice hockey player. “He thinks it’s so cool that
his dad is team doctor.” His wife Rachel has said no to Harry’s football
career but is still wavering about the ice hockey. “We met in high school
so she’s a Jersey girl from River Edge.” Harry also has a little brother
named Elliot, 2.

In 2001, his decision to join the military might have seemed crazy
to family and friends but for this dedicated doctor, that journey,
especially to Afghanistan, gave him “a new perspective. Living, eating,
and sleeping with folks you would never otherwise interact with makes
you realize just how similar we all are. Their struggles are our struggles.
We are not so very different at all.”
(Left to right) The essence of teamwork: Constantinos Lovoulos, MD, Aziz Merchant, MD, and Maria Baptiste, APN.
New Jersey is home to many sports teams whose performance inspires accolades from devoted fans. Teamwork is also a defining strength of some physician practices offering multifaceted, one-stop problem-solving approaches to complex medical issues. The patient’s care plan reflects the input of each team member, as well as the group’s collective thinking. When swallowing is the issue, a group of experts at New Jersey Medical School provides a collaborative approach that translates into quicker and better outcomes.

Swallowing is one of those functions most of us rarely think about—that is, until something goes wrong. An estimated one in five American adults is affected by acid reflux (when stomach acid backs up into the esophagus), impacting the comfortable passage of food, drink, and medicines from the mouth down the esophagus to the stomach. Heartburn is a primary symptom. Just listen to the frequency of TV commercials for antacids, such as Tums and Alka-Seltzer; H2 blockers including Zantac and Pepcid; and proton pump inhibitors such as Prevacid, Prilosec, and Nexium. These therapies usually provide relief to the millions who experience “that burning sensation,” and other symptoms, including chest pain, persistent sore throat, hoarseness, and difficulty swallowing.

“Most people are helped by these remedies,” says Aziz Merchant, MD, NJMS assistant professor of surgery. “Some used to be available only by prescription. Now most are sold at Costco and elsewhere.”

Merchant came to his current job in 2013 with the skills and expertise to help build a collaborative group to address complex issues of the gastrointestinal (GI) tract that do not respond, or no longer respond, to medicines. After earning a medical degree from Thomas Jefferson University, he completed a general surgery residency at Georgetown University and a fellowship in advanced GI, minimally invasive, and foregut surgery at Emory University.

“I have a particular interest in heartburn and swallowing disorders,” he states. “I enjoy the technical challenge of repairing complex problems of the stomach and esophagus and the satisfaction of improving patients’ day-to-day lives.”

Surgery is generally advised only for the small percentage of those not helped by medication. But do the math. An estimated 60 million Americans experience heartburn at least once a month. If just 5 percent of them require further treatment, that adds up to a lot of people. “The percentage is small but the numbers are big,” he says.

While patients sometimes experience unremitting symptoms for years before ending up in a surgeon’s office, “many complex cases can be fixed even when surgery has been done before and hasn’t worked,” Merchant explains. Unfortunately, patients often visit several different health care providers before landing in the right place.

Merchant describes a common scenario: “A man in his 50s with heartburn symptoms and acid reflux has been self-medicating for five years. When the medicines no longer work and he’s having difficulty swallowing, he consults his primary physician, who does basic testing to rule out a bacterial infection. Or the patient may be referred to a gastroenterologist, who performs an endoscopy to see inside the digestive system, looking for acid burns in the esophagus that could lead to potentially dangerous changes.”

The gastroenterologist can also take biopsies of the esophagus and stomach, looking for causes of the heartburn. “Is acid coming back up?” asks Merchant. “Is the esophagus not working well? There are studies to determine what kind of treatment is needed.”

While surgery sounds like a serious approach to remedy heartburn, it is sometimes the only solution. Since heartburn is such a common GI symptom, and the one most often self-medicated, the cases coming in to the swallowing group are often refractory—or stubborn. “We specialize in fixing the really complex stuff,” says Merchant.

Other problems the group sees are hiatal hernia (when part of the stomach slides up into the chest cavity), and motility, or movement, disorders of the stomach and esophagus,
including blockages in the esophagus or a slowing down of muscles in the stomach. While many of these issues come on with age, patients range from 25 to 90.

Minimally invasive procedures are becoming the norm in this specialty; and Merchant says he rarely uses the more traditional open surgery. What does this mean? “Usually five small incisions for the instruments, including a rigid scope with an attached camera, which provides pictures of the surgical site; no large cuts; 24- to 48-hour hospital stays with a faster recovery time; and results that equal traditional approaches,” says the surgeon. “Patient satisfaction is high.” His surgical partner is Constantinos Lovoulos, MD, NJMS assistant professor of surgery, who completed his general surgical training at Henry Ford Hospital, and his cardiac and thoracic surgical residency and fellowship at Yale. He specializes in all aspects of cardiac and thoracic surgery, including both open and robotic lung and esophageal surgery, mitral and tricuspid valve repair, and surgery of the thoracic aorta.

Robots are among the tools used in digestive system surgery—although not always. The two surgeons have been trained in robotics and provide training to surgery residents at University Hospital, Newark—on how to use robotics. Merchant says the surgeon has the advantage of better 3-D visualization; and “there is an ergonomic advantage to the surgeons. But there’s no real difference in the results.”

Recently a 78-year-old man came to the group complaining of chest pain, difficulty swallowing, heartburn, and regurgitation of food. He had these symptoms for more than a decade, but now they were getting worse. “He had a hiatal hernia,” says Merchant. “His entire stomach was in his chest.” The patient had refused surgery previously.

Advanced testing was done and the swallowing group discussed the findings. Surgery was recommended and scheduled. “We made five small incisions, inserted our instruments, brought the whole stomach back down, and closed the hole in the diaphragm,” says Merchant.

Members of the group include Sushil Ahlawat, MD, associate professor of medicine, who has expertise in advanced diagnostic and therapeutic endoscopy procedures of the GI system, Michael Demyen, MD, assistant professor of medicine, and Siddharth Verma, MD, advanced endoscopy fellow, all from the Division of Gastroenterology; and advanced nurse practitioner Maria Baptiste. The entire group is involved in diagnosing the problem, proposing and planning treatment, and before- and after-care if surgery is advised.

This patient left the hospital two days later, feeling good, and on a liquid diet. He slowly advanced to soft food, was able to get off the medications he’d been taking for years, and will eventually return to a normal diet. “He may not be able to eat a Porterhouse steak,” says Merchant, “but that’s a small sacrifice for big returns.”

Another recent patient was diagnosed with achalasia, “an uncommon condition, but common for our group to see,” explains Merchant. “Muscles that allow food to pass from the esophagus to the stomach are not relaxing properly, causing a blockage. As food backs up, the esophagus enlarges and causes swallowing problems.

“Gastroenterologists can do pneumatic dilatation—insert a balloon in the space, then expand it to spread the muscles open,” he continues. “Another effective option is the injection of Botox into this area. If those treatments don’t work or the condition recurs, the patient would be sent for surgery.” Merchant uses an instrument to split the muscle open from the esophagus to the stomach, creating a wider, bigger passageway.

“This is the place to go for all swallowing and heartburn issues,” he concludes. “We bring all the experts to the table to provide the best plan of care and the best patient experience. Catching problems early ensures a better outcome. And as educators and researchers, we’re preparing the next generation of practitioners. That makes us stronger.”

It’s All About Teamwork

It’s “one-stop shopping,” providing the patient with greater convenience. But when it comes to health care, the benefits can be life-changing. Put several top medical professionals around a table to develop the best treatment plan, and you’ve got an ideal scenario.

This specialty group includes experts in gastroenterology, cardiothoracic surgery, and minimally invasive GI surgery, who address issues affecting the gastrointestinal tract. Working at an academic health center, they use the best and most up-to-date diagnostic and therapeutic equipment; provide the newest drug interventions and surgical procedures; and act as a team to give all-around expert care.

To contact a member of the group, email NJSwallowing@rutgers.edu or call 973-972-2400 or 973-972-2500.

Other members of the specialty group (left to right): Siddharth Verma, MD, and Sushil Ahlawat, MD.
NJMS and GSBS researchers, laboratories and institutes are pushing the boundaries of knowledge on topics ranging from drug-resistant pathogens to the Zika virus. Thinking outside the box, some of them are also finding creative ways to fund their work. Learn more about their efforts in and out of the lab.
Tracking Drug-Resistant Pathogens

*The New England Journal of Medicine,* January 19, 2017 features a study on the transmission of highly drug-resistant tuberculosis from person to person. NJMS Professor Barry Kreiswirth, PhD, founding director of the Public Health Research Institute (PHRI) TB Center, was part of the research team. Drug-resistant tuberculosis threatens years of advances in stemming TB and HIV’s spread globally. This study reflects the Kreiswirth laboratories’ history of tracking the emergence of multi-drug-resistant pathogens, including the global spread of methicillin-resistant *S. aureus*, unraveling the resurgence of MDR TB among HIV in New York City in 1991, and investigating the rise of vancomycin-resistant *Enterococcus* in the late 1990s. The current work in the laboratory has extended their molecular epidemiological strategy toward the tracking of carbapenem resistant Gram-negative pathogens from the New York City epicenter to global regions and using whole genome sequencing methods to develop targeted molecular tools for both surveillance and public health studies.

TB and Drug Resistance

A recent paper in the journal *Clinical Infectious Diseases* by a research team led by Christopher Vinnard, MD, MPH, MSCE, a new faculty member in the NJMS Department of Medicine and PHRI, looks at the relationship between drug resistance and 10-year mortality among patients with tuberculous meningitis (TBM), a particularly devastating manifestation of TB. They determined that resistance to rifampin—one of the mainstays of TB treatment—was associated with rapid early death; and resistance to isoniazid—another frontline TB treatment—was also often associated with earlier death. Their findings support the importance of quick diagnosis of tuberculous meningitis, as well as the introduction of second-line drugs for patients with suspected drug-resistant TBM.
Notable Awards

New Jersey Health Foundation (NJHF) recently awarded more than $1.1 million to support investigators advancing health-related research in New Jersey. Seven grants were awarded to NJMS faculty members: Arkady Mustaev, PhD, PHRI, for Bioinspired design of new antibacterial agents; Tibor Rohacs, PhD, and Joel Freundlich, PhD, Department of Pharmacology, Physiology & Neuroscience, for Developing peripherally acting GABAB receptor agonists for pain control; Shinichi Oka, PhD, Cardiovascular Research Institute, for Gene therapy for diastolic heart failure; David Livingston, MD, Department of Surgery, for Mesenchymal Stem Cells for Neural Repair in a Clinically Relevant Model of Blunt Traumatic Brain Injury; Krista Blackwell, PhD, Department of Pharmacology and Physiology, for Remodeling of Beta-adrenergic receptor expression and function with chronic ethanol consumption causes changes in contractile function of the heart; Padmini Salgame, PhD, Department of Medicine, Infectious Diseases, for Blocking T cell costimulation: A novel approach to enhance TB vaccine efficacy; and Maria Laura Gennaro, MD, PHRI, for Mechanisms of Mycobacterium tuberculosis-induced dysregulation of macrophage lipid metabolism.

Fighting Drug Resistance

NJMS professor David Perlin, PhD, executive director of PHRI, was awarded a $300,000 contract by the CDC to lead a team to investigate genetic mechanisms and factors fueling the emergence of antifungal drug resistance among patients in clinics to Candida glabrata—a common fungus that quickly develops resistance during therapy. An individual with a compromised immune system due to cancer, transplantation, AIDS, or another condition is particularly prone to fungal infections that develop during treatment. The emergence of drug resistance can be devastating. The Perlin laboratory will partner with Shawn Lockhart, PhD, director, Fungal Reference Laboratory and team lead, Antifungal Laboratory, Mycotic Diseases Branch at the CDC, and others.

Happening in May

The Reynolds Family Spine Laboratory presents the 7th Annual One-Day Symposium, Current Advances in Spinal Cord Injury Research, featuring a panel of internationally renowned scientists.
What About Zika?

An article in the fall issue of Stanford University’s Biomedical Computation Review discusses the work of NJMS faculty member Joel Freundlich, PhD, and research teaching specialist III Alex Perryman, PhD, both in the Department of Pharmacology, Physiology & Neuroscience, and the Center for Emerging and Reemerging Pathogens, and other team members, to advance the OpenZika project. “The idea is to jumpstart drug discovery by computationally whittling down the massive list of possible drug candidates to a more manageable set of likely prospects that can be tested in the lab,” says Freundlich. According to the article, OpenZika performs virtual experiments “that predict how small, drug-like molecules will bind and interact with the proteins that scientists suspect allows the Zika virus to infect its victims and replicate inside them.” The work is done on IBM’s World Community Grid (WCG), which uses time on millions of computers, smart phones, and tablets donated by volunteers across the globe. This creates “one of the largest supercomputers on the planet,” explains Perryman.

A November 2016 update states that the research team has identified five compounds that will now undergo laboratory testing. Stay tuned to hear more news about the team’s progress.

Current therapies work by reducing active inflammation, frequently by suppressing the immune system, which then leaves patients more vulnerable to infections. And for some with Crohn’s, none of the available remedies work.

Edelblum’s approach involves achieving a better “picture” of the body’s initial “normal” immune reaction by using new intravital microscopy techniques to image immune cell behavior in living tissues. She can observe in real time what then goes wrong, with the goal of heading off the inflammatory response in the intestinal tract and preventing the steps leading to Crohn’s. “We hope this approach can also help patients maintain remission and prevent relapse,” she says.

This project has great personal meaning for Edelblum. In turn, she hopes others with Crohn’s—and their friends and family who donate even a small sum through Consano (https://consano.org)—will experience a positive personal connection with the research project.

She Takes It Personally

Ever heard of Consano? If not, perhaps it’s time you did. Not a household word (yet), this new crowd-funding platform allows individuals to donate to a particular researcher or medical research project, without going through a larger organization. The project receives a whopping 97.8 percent, and PayPal just 2.2 percent, of the donation.

For Karen Edelblum, PhD, NJMS assistant professor of pathology and laboratory medicine and a Chancellor Scholar at the Institute for Infectious and Inflammatory Diseases (i3D), Consano makes sense. While she recently garnered several substantial research grants from traditional sources, she’s open to less traditional fundraising venues as well. Without proper funding for lab equipment and personnel, medical research can be seriously hampered.

Diagnosed at age 13 with Crohn’s disease, Edelblum has not wavered from her mission: “I always knew that I wanted to try to fix this problem, to contribute to finding a cure.”

Crohn’s disease is a chronic, inflammatory disease affecting the gastrointestinal tract, causing havoc in the gut with flare-ups that can happen anywhere from the mouth to the anus. An estimated 1.6 million Americans are affected. “Chronic illness is a great motivator for a researcher,” says Edelblum. “You never lose sight of why you are doing your job.”

Welcome Aboard

Tessa Bergsbaken, PhD, recently joined the faculty of the interdepartmental Center for Immunity and Inflammation and the NJMS Department of Pathology and Laboratory Medicine. She earned a PhD in microbiology from the University of Washington and recently completed a post-doctoral fellowship at the University of Washington. Her studies during her fellowship addressed the adaptive immune response to the pathogen Yersinia pseudotuberculosis in the intestine. At NJMS her research will focus on mucosal innate and adaptive immune responses in the intestine during infection and in the context of colorectal cancer. More about her research will be forthcoming in a future issue of Pulse.
Message from the Alumni Association President

Dear alumni,

As President of the Alumni Association, I’ve had the pleasure of seeing the many ways in which the association supports our students. From their first days as students, to the time when they become physicians and join us as alumni, the association is there.

Each year during orientation, I welcome new students and explain how the association supports them. We sponsor the orientation breakfast and provide each student with a water bottle and penlight. As the end of the first year concludes, the summer is one of the last times students will have a long break. During this time, the Alumni Association provides students pursuing medically relevant travel with an opportunity to apply for an International Study Scholarship. For the past several years the Alumni Association has supported Match Day by funding the use of a photo-booth, a much-enjoyed addition to the day’s celebration. We are also happy to provide fourth year students with a gift or special event to mark their graduation. And finally, at Convocation, students receive an NJMS alumni pin and certificate as they join our alumni ranks.

As students prepare to finish medical school, the association sponsors the lunch provided at the exit interviews, mandatory informational sessions for students who received financial aid, and I have the opportunity to speak to the students as they get ready for the next phase of their professional lives. For the past several years the Alumni Association has supported Match Day by funding the use of a photo-booth, a much-enjoyed addition to the day’s celebration. We are also happy to provide fourth year students with a gift or special event to mark their graduation. And finally, at Convocation, students receive an NJMS alumni pin and certificate as they join our alumni ranks.

Each fall the association awards scholarships to second, third and fourth year students. We provide funding to the Student Council and the Student Family Health Care Center and support the student tour guides for Parents Day and admission seminars. We also provide a stipend for students who participate in our annual fall and spring phone-a-thons. This year, we are planning to sponsor a special end-of-year event for the third year students.

I would like to thank all alumni who actively support the Alumni Association and help us carry on our mission.

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Revolutionary for 250 Years

In honor of Rutgers’ 250th Anniversary, Lionel Corporation has produced a limited-edition, functional trolley motorized with bumper-controlled back-and-forth operation. Features include interior lighting, maintenance-free motor, traction tire, operating LED headlights, window silhouettes and two adjustable trolley poles on roof. The purchase supports NJMS student scholarships. To purchase the train, visit: http://250.rutgers.edu/shop.
Finding Their Way—and Each Other—at NJMS

BY TY BALDWIN

Jessica Simon and Pedro Rodriguez didn’t need OKCupid or Match.com. Instead, they had Rutgers University and Biology 101.

“I spotted him in the lecture hall and wanted to get to know him a little better,” says Simon (BS, Rutgers 2005; MD, NJMS, 2010). “So I worked my way toward sitting next to him.”

Clearly, Simon, then a freshman self-described “Jersey girl” from Lyndhurst, knew what she was doing. She and Rodriguez (BS, Rutgers, 2003; PhD, GSBS 2009), then a sophomore from Astoria, Queens, via Ewing, NJ, recently celebrated their fifth wedding anniversary.

Still, that’s not to say that their courtship didn’t take some work. The two were together for ten years before they married, through college, grad school and med school, and, finally, Rodriguez’s post-doc at Harvard Medical School, which, coupled with Simon’s medical research in Miami, kept them apart for almost two years. “Once we were back in the same geographic location we decided to plan a wedding,” Simon says.

Today, Simon, a dermatologist in East Windsor, is one of less than a handful of board-certified pediatric dermatologists in New Jersey. Rodriguez is a scientific affairs manager at Roche Diagnostics. Both are quick to credit a Rutgers program, Success in the Sciences (SIS), which offers academic support to economically disadvantaged and underrepresented minority students, for their professional accomplishments, and for their romantic connection.

Of being in medical school together, Rodriguez says, “It was great to know that support was there…a real comfort in knowing Jess and I were in the same institution at the same time.”

majority of people came from working class families was rare. So, to get into college and find a network of people who could lead me in the right direction and who believed in me — they are why I’m doing what I’m doing.”

Rodriguez, whose parents were born in Puerto Rico, had a similar experience. “My dad was a drug counselor at a methadone clinic and my mom was a nurse’s assistant. When I got to college, I didn’t know what direction I wanted to go in — medicine or research. Dr. Khan’s program helped me to focus and determine what path I wanted to take.”

Both Simon and Rodriguez remember being interested in science from a young age. “I wanted to be a veterinarian,” says Simon. “I loved animals and always wanted to take care of injured birds or stray cats. My interest progressed to humans because I enjoy working with kids. I’m the youngest of three, and part of what I liked about pediatrics is that I always wanted to be a big sister and mentor. In pediatrics I feel I can be somebody who not only helps kids physically get over their ailments, but who also supports them emotionally.”

Simon was drawn to dermatology by a difficult time in her own adolescence. “I started to lose hair in high school. My mother discovered bald patches. While it wasn’t life threatening, it was very traumatic psychosocially.” A dermatologist diagnosed Simon with alopecia areata, an autoimmune disease that causes hair loss. “That experience led to my decision to take a year off, between my third and fourth years of med school, to do research into hair disorders at the University of Miami.”

Rodriguez traces his scientific curiosity to camping trips to Harriman State Park in upstate New York. “From as early as I can remember, going camping with my parents — sitting lakeside and watching the
sunset, or looking at the trees—instilled an interest in the natural world. You can imagine the contrast, coming from Astoria, where it’s asphalt and concrete. Camping was like another world. It sparked my imagination and made me curious about the inner workings of nature.”

After finishing their undergraduate degrees at Rutgers, NJMS seemed a natural fit for both. “I was born in Newark and have family there,” Simon says. “It’s my second home. I loved being part of such a diverse student body and with a diverse patient population. And being fluent in Spanish enabled me to be a translator and to relate to a lot of our patients.”

She continues, “I had incredible mentors at NJMS. Dr. Maria Soto-Greene, Dr. George Heinrich, Dr. Jo Ann Reteguis, Dr. Robin Schroeder, just to name a few. Mercedes Rivero—assistant dean for admissions—was not only a wonderful mentor and my biggest fan, she became like family. Her warmth and ability to relate to students is truly inspiring. We still keep in touch. I met a lot of women physicians and medical students who supported me in my decision to pursue a specialty in dermatology. To have mentors in the past who taught me how to persevere, like Dr. Pranela Rameshwar and Dr. Muriel Grimmet, to name a few. Ian was the first to teach me how to think like a scientist. I will always look fondly on those years of being the devoted scientist in the laboratory and the time I spent with my lab peers, who became my second family.”

“Another nice thing,” he adds, “was that when I needed a break, unless Jess was extremely busy with something, we might be able to have lunch together, or meet up in a hallway for a few minutes. It was great to know that support was there, and a real comfort knowing that we were in the same institution at the same time.”

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1960s
James Donohue, MD’69, a professor at UNC-Chapel Hill, is the Emeritus Chair of the American Thoracic Society (served as chair 2010–2016).

1980s
Kenneth Paonessa, MD’84, is enjoying the birth of his first granddaughter Juniper Paonessa.

Kathleen Francis, MD’89, received a proclamation from the NJ Senate and General Assembly in recognition of World Lymphedema Day in March. She is medical director of the Saint Barnabas Lymphedema Treatment Center.

1990s
Linda Singletary, MD’90, married Bobby Dean Brown on June 16, 2016.

2000s
Michael Ehrenreich, MD’06, a dermatologist in South Orange, NJ, has written a musical, Medicine the Musical. Set to a dynamic rock score, it follows the lives, loves, and education of a group of medical students.

Yuri T. Jadotte, MD’10, assistant professor, Division of Nursing Science, School of Nursing, was inducted as a member of the New York Academy of Medicine and the National Academies of Practice.

Melissa Martin, MD’13, is an attending physician at The Children’s Hospital of Philadelphia-South Philadelphia Primary Care.

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IN MEMORIAM
Joseph Boyle III, MD’60, of Wyckoff, NJ, passed away on January 19, 2017 at the age of 82. He was a graduate of Tufts University and was a member of the Charter Class of Seton Hall College of Medicine. He served with honors in the U.S. Air Force, then spent his medical career as a professor teaching physiology to medical and dental students, and doing research in cardiovascular and respiratory physiology. Dr. Boyle was predeceased by his wife Patricia and son Bruce. He is survived by his daughter Debra Leighton and husband G. Timothy Leighton; son Joseph Boyle and wife Ellen Boyle; six grandchildren, two great-grandchildren and extended family.

Justin Richard Meyer, MD’13, of Jersey City, NJ, passed away on March 22, 2016, at the age of 31. He graduated from Emory University in 2007 with a degree in neuroscience and behavioral biology and worked at Duke University Medical Center. Upon his graduation from NJMS he trained first in general surgery and later in anesthesia. He is survived by his wife Janice (Mayes) Meyer, parents Diane and Dennis Meyer, sister Carissa Meyer and paternal grandparents Margaret and Harold Meyer.

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Liver transplant surgeon Dorian Wilson, MD’82, with scholarship recipients Emaad Iqbal ’17 and Michael Cacoilo ’17.
Chronicles of Giving and Receiving

BY GENENE W. MORRIS

Since 1979, the Alumni Association of Rutgers New Jersey Medical School has awarded more than $1 million in much-needed financial support to aspiring physicians. This fall, alone, the association presented 122 deserving second-, third-, and fourth-year medical students with more than $205,000 in scholarships ranging in amounts from $1,000 to $5,300. Today, the association administers 54 Endowed Scholarships—which begin with a minimum donation of $50,000—and 36 Founders’ Scholarships (formerly known as Named Scholarships)—which start with a minimum donation of $2,000. This is welcomed assistance considering that medical school debt today totals an average of $180,000, according to the Association of American Medical Colleges. The following are stories of alumni who have answered the association’s appeal for their help and the scholarship recipients who, inspired by the generosity of donors, are resolute in their desire to give back.

Alfredo Masullo, MD’75 & Richard Schmidt, MD’13

Time is a precious commodity for neurosurgery resident Richard Schmidt, MD. There simply is never enough of it. So when he gets calls on his cell phone, he admits, “It’s never an opportune time.”

But when those calls come from Rutgers New Jersey Medical School students during semiannual phone-a-thons sponsored by the Alumni Association, he tries to give them their due. “I’m always polite when I speak with them.” After all, it was not that long ago when Schmidt, a 2013 graduate of New Jersey Medical School, was working the phones during similar fundraising events, seeking donations for scholarships from the school’s alumni. Now that he receives the calls—or solicitations from the Alumni Association in the mail—he sends as much as he can afford, knowing all too well that every little bit helps.

“Really from a financial aspect, it does ease the burden somewhat,” says Schmidt, who in 2012 received the Gustavo and Natalina Masullo Scholarship. “When you apply for loans, most of those funds disappear immediately into tuition and basic living expenses. Then you’re left to fend for yourself for things that are not, in the global scheme of things, as expensive.” Having the money to help with the purchase of textbooks and other course-related expenses, Schmidt says, really makes a difference. “When you’re a needy student eating mac and cheese, that extra cash does help.”

Now into his residency at Thomas Jefferson University in Philadelphia, Schmidt, who is eyeing a career in endovascular neurosurgery, appreciates what the Alumni Association did for him. The amount of scholarships that the association hands out promotes what he describes as the “cyclical nature” of the relationship between the institution and its graduates. “People receive the support and then down the line, they pay it forward” to the school’s current students.

This is a sentiment that NJMS grad Alfredo Masullo, MD,’75, the creator of the Gustavo and Natalina Masullo Scholarship, finds heartwarming. “That’s fantastic. That’s very nice.” Masullo, a Rutgers College graduate who remembers receiving a scholarship when he was a student and how it helped further his medical studies, created the scholarship in 1988 as a way to honor his parents, whom he describes as “working people who scrimped and saved to send me to medical school.”

Now a dermatologist who practices in Hackensack, NJ, Masullo gives to the scholarship fund every year. He says his reason for giving is very simple: “When I went to school, it was not nearly as expensive as it is today. So if I could help somebody to save a little bit of money, I’m very happy to give. That’s the bottom line.”
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Match Day 2017 | Photo by Keith B. Bratcher, Jr.