Gratitude and Joy at the Master’s Commencement

The Graduate School of Biomedical Sciences of the Icahn School of Medicine at Mount Sinai held the 2018 Master’s Commencement on Friday, June 22, in a ceremony that celebrated the graduates’ achievements and looked ahead to their fulfilling and varied careers.

“While some of you will continue on to careers in academia, others will consider the pharmaceutical or biotech industries, community-based public health, health care administration, epidemiology, or global health. Some of you may even start your own companies,” said Marta Filizola, PhD, Dean of the Graduate School of Biomedical Sciences, and Professor of Pharmacological Sciences. “Whatever career path you take, we hope you will remain in touch with the Icahn School of Medicine—a home you can always come back to for mentoring, career advice, respect, and appreciation.”

In total, 165 students were conferred master’s degrees, including 95 in Public Health, 25 in Biomedical Sciences, 19 in Health Care Delivery Leadership, 11 in Clinical Research, 10 in Genetic Counseling, 5 in Biostatistics, and 2 in Biomedical Informatics. At the MD/PhD Commencement in May, an additional 7 MD/Master of Public Health degrees and 5 MD/Master of Science in Clinical Research degrees were conferred.

The master’s ceremony often returned to the theme of gratitude. Dennis S. Charney, MD, Anne and Joel Ehrenkranz Dean, Icahn School of Medicine at Mount Sinai, and President for Academic Affairs, Mount Sinai Health System, asked the graduates to thank the “parents, grandparents, siblings, spouses, and friends” present, saying, “I know that you helped set the path for each of these students to achieve their greatest potential.”

Barbara Murphy, MD, Honored By Her Alma Mater in Ireland

Barbara Murphy, MD, Chair of the Samuel Bronfman Department of Medicine at the Icahn School of Medicine at Mount Sinai, was a featured speaker at the May 2018 graduation ceremony of her alma mater, the School of Medicine of the Royal College of Surgeons in Ireland (RCSI).

During the event, Dr. Murphy—a pioneering nephrologist and immunology researcher, the Murray M. Rosenberg Professor of Medicine, and Dean for Clinical Integration and Population Health, at the Icahn School of Medicine—received a prestigious Honorary Doctorate Degree from RCSI, an award she found particularly gratifying. RCSI is based in Dublin, her hometown. Dr. Murphy was one of three siblings who graduated from RCSI with a medical degree, and her parents were again in the audience cheering her on.

“It was a chance to look back and see what pieces of advice I would have given myself as a graduate 29 years ago,” she said. Her advice was straightforward. “Do not be afraid to stand up and take risks for the good of...”
Novel Product to Help Patients at Risk for Kidney Disease

Steven G. Coca, DO, and Girish N. Nadkarni, MD, nephrologists in the Samuel Bronfman Department of Medicine at the Mount Sinai Health System, have invented an artificial intelligence-based prognostic scoring system that is designed to identify patients at high risk for developing progressive kidney disease. The pioneering product, KidneyTrack™, will enable medical professionals to intervene early in a patient’s disease cycle when treatment is most effective, before kidney disease advances to kidney failure, which requires dialysis. KidneyTrack combines data from the electronic medical record, with genetic information and novel blood biomarkers, and is paired with suggestions for optimized preventive treatment and management options for patients, particularly those at early stages of kidney disease.

To commercialize KidneyTrack, Mount Sinai Innovation Partners, in collaboration with Drs. Coca and Nadkarni, entered into a partnership agreement with RenalytixAI Plc. The partnership will leverage Mount Sinai’s data warehouse, which contains more than 3 million patient health records and 43,000 patient records in its BioMe™ Biobank repository. KidneyTrack, which will enable clinicians to continuously monitor and identify patients in the Mount Sinai Health System who are at risk for progressive kidney disease and dialysis, will be tested for its clinical utility in a multicenter study beginning in mid-2019.

Barbara Murphy, MD, Chair of the Samuel Bronfman Department of Medicine at the Icahn School of Medicine at Mount Sinai, will serve as Chair of the Scientific Advisory Board of RenalytixAI. Along with Drs. Coca and Nadkarni, Judy H. Cho, MD, Director of the Charles Bronfman Institute for Personalized Medicine, and John Cijiang He, MD, PhD, Chief, Division of Nephrology, also will serve on the Scientific Advisory Board.

Diabetes and high blood pressure are the leading causes of kidney failure. The Centers for Medicare and Medicaid Services estimates that the United States spends approximately $34 billion to treat kidney failure. The National Kidney Foundation reports more than 500,000 patients are being treated with dialysis for the disease.

“There is a general lack of awareness on the part of patients and health care providers regarding chronic kidney disease and there hasn’t been enough focus on and resources in preventing it,” says Dr. Coca, Associate Professor of Medicine (Nephrology), Icahn School of Medicine at Mount Sinai. “Both the providers and the patients themselves will receive updates on their risk score generated by KidneyTrack, which will serve to increase awareness and motivation for behavioral change and management strategies.”

Adds Dr. Nadkarni, Assistant Professor of Medicine (Nephrology), Icahn School of Medicine at Mount Sinai, and Clinical Director of the Charles Bronfman Institute for Personalized Medicine, “Using comprehensive data from so many patients will make a difference in people’s lives. Now we can look at associations and relationships that were not possible before at this scale and change the paradigm.”

Initially, KidneyTrack will focus on patients with type 2 diabetes and those of African ancestry. Data generated from this will potentially be useful in analyzing other groups of patients at risk for progressive kidney disease.

“This new technology has the potential to help patients with renal disease on a global basis and may support the development of additional applications for monitoring individuals with other chronic diseases,” says Erik Lium, PhD, Executive Vice President of Mount Sinai Innovation Partners.

Barbara Murphy, MD, Honored by Her Alma Mater (continued from page 1)

your patients,” Dr. Murphy told the 285 graduates, who came from 29 countries. “You cannot have an impact if you live in the shadows afraid to fail or afraid of upsetting others. Success is not about abstracts, papers, awards, or titles. It is about having a positive impact on the lives of others, about meaningful change.”

Dr. Murphy discussed a highlight of her career, her work as a young physician at Mount Sinai in 1997, where she helped establish the feasibility of performing kidney transplants on patients with HIV, which is the standard of care today.

“We were still in the midst of the AIDS crisis, patients had staggering mortality rates and were socially ostracized,” she said. “I had met precisely two people affected by HIV prior to arriving in New York, and was now faced with many otherwise ‘healthy’ HIV patients who had no hope of getting off dialysis.” She and a small group of other researchers from eight U.S. medical centers—with support from the National Institutes of Health—found a clear scientific rationale for moving forward with transplants.

“We faced resistance,” she said, “and were even verbally abused and insulted by people who did not look at patient suffering, the science, or the data, but rather felt it was their right to pass moral judgment on people with HIV, and that there was a moral hierarchy when it came to allocation of donor kidneys.” Interestingly, she added, “Two weeks ago we received an email from one of our patients who was in that trial thanking us on his 15th renal transplant birthday!”

During medical school, Dr. Murphy said she planned on becoming a full-time clinician, not a researcher, and that the field of genomics research did not exist. “You cannot predict the circumstances, opportunities, discoveries that will occur that will change your lives,” she told the audience. “The question is, will you step forward and run with it when opportunity comes your way, or will you choose the status quo?”

Recently, Dr. Murphy took on an additional leadership role as Chair of the Scientific Advisory Board of RenalytixAI Plc, (see article above). RenalytixAI has partnered with the Mount Sinai Health System to create a novel artificial intelligence-based platform, KidneyTrack™, that predicts a patient’s risk for progressive chronic kidney disease.
Celebrating Trailblazer Pamela Sklar, MD, PhD

Luminaries in the study of psychiatric genomics joined the Mount Sinai community in celebrating the work of the late Pamela Sklar, MD, PhD, a groundbreaking psychiatrist and neuroscientist who made major discoveries that established the genetic roots of mental illness.

In her honor, the Icahn School of Medicine at Mount Sinai launched the annual “Advances in Psychiatric Genomics” lecture, held on Monday, April 16, in Goldwurm Auditorium, and renamed the division she created—now one of the best in the nation—the Pamela Sklar Division of Psychiatric Genomics. Dr. Sklar was Chair of the Department of Genetics and Genomic Sciences.

Celebrating her trailblazing research—and presenting their own—were scientists from the National Institute of Mental Health, Harvard University, the University of Pennsylvania Perelman School of Medicine, and the Icahn School of Medicine, among others. Attendees also included Dr. Sklar’s husband, Andrew Chess, MD, Professor of Genetics and Genomic Sciences; Cell, Developmental and Regenerative Biology; and Neuroscience; and their children, Michael and Isabel. The day after the event, the inaugural “Get Psyched” 5k Run/Walk was held in Central Park to benefit the newly named division.

“Pamela was perhaps one of the bravest people I’ve ever met,” said Dennis S. Charney, MD, Anne and Joel Ehrenkranz Dean, Icahn School of Medicine at Mount Sinai, and President for Academic Affairs, Mount Sinai Health System. “She led a revolution in the study of the genetic basis of mental illness, showing that hundreds of genes are implicated, not just a handful as was previously believed. It took courage to challenge the prevailing point of view.”

Raising Awareness for Biomedical Research

Seven researchers and veterinarians from the Mount Sinai Health System discussed humane animal research at a panel held at Hatch Auditorium to commemorate Biomedical Research Awareness Day (BRAD) on Thursday, April 19. They joined more than 110 other international institutions in acknowledging the important role that laboratory animals play in advancing new treatments for complex conditions that include, but are not limited to, Alzheimer’s disease, cancer, and addiction.

“Animal models that mimic the human condition can help us focus on one chemical in an effort to start to figure out new treatments,” said Yasmin Hurd, PhD, Director of the Addiction Institute at Mount Sinai, who works with rodents to study the developmental effects of cannabis. Through these studies, Dr. Hurd has found that cannabidiol—a chemical found in marijuana—can be used in humans to decrease opioid-seeking behavior.

“For a very long time, the scientific community has been quiet about animal research,” said Jaclyn R. Steinbach, BVetMed (Hons), MRCVS, Clinical Veterinarian and Instructor, Center for Comparative Medicine and Surgery, who was the organizer of the event. “We need to share what we are doing and show that we are proud.”
New Sculpture in Hess Center

A dynamic 16-foot sculpture by the renowned American artist Joel Shapiro now stands in the lobby of the Leon and Norma Hess Center for Science and Medicine on the Icahn School of Medicine at Mount Sinai campus. Installed in June, the expressive, brightly colored sculpture in painted aluminum was a gift from Mount Sinai Trustee Arne Glimcher, who commissioned it for the Hess Center. Mr. Shapiro’s sculptures and paintings are on display in collections belonging to prestigious museums in the United States and throughout the world, including the Museum of Modern Art in New York; the National Gallery of Art in Washington, D.C.; the Tate Gallery in London; the Musée National d’Art Moderne in Paris; and the Moderna Museet in Stockholm.

Honoring Leadership Excellence in Cardiovascular Care for Women

Roxana Mehran, MD, an internationally renowned clinician and researcher in the field of interventional cardiovascular disease, received the 2018 Wenger Excellence in Medical Leadership Award from WomenHeart: The National Coalition for Women With Heart Disease during a dinner on Monday, May 7, in Washington, D.C. Dr. Mehran is Professor of Medicine (Cardiology), and Population Health Science and Policy, and Director of Interventional Cardiovascular Research and Clinical Trials at the Zena and Michael A. Wiener Cardiovascular Institute of the Icahn School of Medicine at Mount Sinai. The Wenger Awards are named for Nanette Kass Wenger, MD, a pioneer in women’s cardiovascular medicine and research, who trained at Mount Sinai. During the award presentation, WomenHeart cited Dr. Mehran’s work in promoting the inclusion and enrollment of women in clinical research, her numerous publications related to sex-based outcomes for women with cardiovascular disease, and her involvement in multiple organizations promoting the advancement of women’s causes in cardiovascular care and professionalism. In 2017, Dr. Mehran received the Bernadine Healy Leadership in Women’s Cardiovascular Disease Award from the American College of Cardiology.

Mount Sinai Doctors Faculty Practice Receives Two Patient Access Awards

The Mount Sinai Doctors Faculty Practice has received two Best Practice Awards from the Patient Access Symposium (PAS), a group of 80 medical centers nationwide. At the awards event in May, hosted by Indiana University Health in Indianapolis, Mount Sinai staff accepted a PAS award for the use of technology in systems that give patients easy access to services like appointment scheduling and referrals. In addition, the practice's Access Center was honored for the efficiency of its call center management. “We greatly appreciate the efforts of the Access Center leadership and staff members,” says Brian T. Smith, Senior Vice President and Chief Operating Officer of the Mount Sinai Doctors Faculty Practice. “This accomplishment was made possible by their seamless coordination and creative solutions, which are driving exceptional patient-centered care.”
Care and Empathy From a Nurse Inspire Former Pediatrics Patient to Become a Physician

When Naysha Lopez graduated from the University of Puerto Rico School of Medicine in June, Evelyn Sotomayor, RN, a pediatric nurse in the intensive care unit (ICU) at Kravis Children's Hospital at Mount Sinai, was in the audience. It was no surprise that Ms. Sotomayor would travel more than 1,500 miles to be by Naysha’s side—this was another celebratory milestone in a long journey that first brought them together in 2004.

In August of that year, 13-year-old Naysha woke up one morning not feeling well, and by the time she got home from school, her skin and eye tone were yellow, and she had considerable abdominal pain. Her doctor in Carolina, outside San Juan, Puerto Rico, diagnosed liver failure, and he immediately arranged for a medical plane to take her to The Mount Sinai Hospital, widely renowned as a center for adult and pediatric liver transplants.

At Mount Sinai, doctors determined she had Wilson disease, an inherited condition that prevents the liver from filtering excess copper from the body correctly, causing organ damage. They initially feared she had 12 hours to live, and they placed Naysha at the top of the transplant list. A match was found one week later, and, on August 27, Mount Sinai surgeons transplanted the donated liver during a 10-hour surgery.

The family recalls a scary and lonely time. In addition to the stress of a life-threatening illness, they didn't speak English, were strangers to New York, and had limited financial resources. But good fortune intervened: Ms. Sotomayor, a New Yorker of Puerto Rican descent, immediately took Naysha and her parents under her wing in the ICU, explaining what to expect throughout the illness, reassuring them, and giving them hope. She also showed Naysha's parents how to use the subway and where to shop for food and clothing.

When Naysha was transferred out of the ICU to another unit, Ms. Sotomayor visited Naysha's bedside at the end of her shift, braiding her hair while encouraging her to be brave. “Sometimes when you're sick, all you want is someone to talk to,” Naysha recalls. “Evelyn went above and beyond to show us she cared.” They talked for hours, and envisioned a future beyond the illness. Ms. Sotomayor even suggested that Naysha become a doctor, noting that her experience would give her a unique perspective.

After two months of hospitalization, when Naysha was transferred to the Transplant Living Center to continue her recovery, it was Ms. Sotomayor who brought her there, on her day off, to help her get settled. When Naysha was stronger, Ms. Sotomayor took the family on a Circle Line cruise and brought them to her Long Island home for the weekend.

In December 2004, fully recovered, Naysha and her family returned to Puerto Rico, where they have kept in touch with Ms. Sotomayor, who over the years has attended many of Naysha’s milestones, including her quinceañera—the traditional birthday celebration for Latina girls when they turn 15—and her high school prom and graduation. “She is like family,” says Naysha, who also recalls the excellent care she received from her entire medical team, and social workers who raised donations for the family and brought in a teacher to help with her schoolwork.

In July, as Naysha—now Dr. Lopez—begins her residency in Emergency Medicine in Carolina, she continues to be inspired by her own experience at Mount Sinai, and, most significantly, by Ms. Sotomayor. “She showed me how rewarding it is to take care of people. Because of Evelyn, I trust nurses and have tremendous respect for the role they play in healing their patients.”

Adds Ms. Sotomayor, “I feel blessed that they have been in my life. I feel good when I can help people and give them hope. That’s the best feeling of all.”

“Sometimes when you’re sick, all you want is someone to talk to. Evelyn went above and beyond to show us she cared.”

—Former patient Naysha Lopez

When Naysha Lopez, MD, received her medical degree, Evelyn Sotomayor, RN, the Mount Sinai nurse who helped care for her in 2004, was there to celebrate.

Naysha Lopez at her high school prom with Evelyn Sotomayor, RN, in 2009.

Thirteen-year-old Naysha Lopez with Evelyn Sotomayor, RN, at Kravis Children's Hospital at Mount Sinai.
The Mount Sinai Health System complies with applicable Federal civil rights laws and does not discriminate, exclude, or treat people differently on the basis of race, color, national origin, age, religion, disability, sex, sexual orientation, gender identity, or gender expression.

Epic Anesthesia, an anesthesia case management and documentation system, will replace the existing CompuRecord Anesthesia electronic documentation system at Mount Sinai St. Luke’s and Mount Sinai West in July. Epic Anesthesia is a vital part of the Epic application suite for Mount Sinai Health System hospital operating rooms and surgical centers.

The integration of Anesthesia with Epic Clinical Applications aims to:
• Improve workflow efficiencies, and increase patient safety and quality of care
• Enable providers to document preoperative evaluations, pre-admission testing, recovery care, post-procedure care, and more
• Provide seamless data accessibility between other Epic-enabled facilities
• Turn collected data into actionable information.

For more information, contact EpicSLWinpatient@mountsinai.org.

Mount Sinai St. Luke’s “Go-Live”:
Tuesday, July 17, early morning

Mount Sinai West “Go-Live”:
Sunday, July 29, early morning

The graduates were challenged to “tackle the hard issues, the seemingly intractable ones,” by Eric J. Nestler, MD, PhD, Dean for Academic and Scientific Affairs, Nash Family Professor of Neuroscience, and Director of The Friedman Brain Institute. One such problem is the epidemic of opioid addiction, he said, which costs the nation $80 billion a year and kills 115 Americans a day. “We need you to confront these difficult questions of our time, knowing that there are few simple solutions and that success will require your bold imagination and working across many disciplines to improve our nation’s public health,” Dr. Nestler said.

The commencement speaker, Debrework Zewdie, PhD, former Director of the World Bank Global HIV/AIDS Program, was awarded an honorary Doctor of Humane Letters degree for her distinguished career in public health. She spent two decades at the World Bank, where she said she often felt like “a mouse in a lion’s den” as she tried to raise awareness and increase funding for the group’s fight against AIDS. By 2000, the level had reached $1 billion, funding programs that have saved millions of lives, she said.

Dr. Zewdie began and ended her address with the story of a 5-year-old girl in Ethiopia who was blinded by the measles for 15 days, recovered, then contracted dysentery a few months later. As one of four children of a single mother, growing up on a struggling farm, the girl faced tough odds. But she grew stronger, drinking fortified milk provided by UNICEF and becoming a voracious reader with encouragement from her older brother.

The little girl is now “standing in front of you,” Dr. Zewdie said, pausing as the audience realized it was her. And in the crowd was a slim man with white hair. It was her brother, Girma Moguss, who had supported her journey from a village school to the University of London and Harvard University. She asked him to stand, and the crowd applauded loudly, a show of gratitude that moved her and many others to tears. “Dear graduates, if I—the 5-year-old from a very humble background—could not only beat the measles and dysentery but could also do well enough to be recognized today, then for you the sky is the limit,” Dr. Zewdie said. “Go and make the world a better place.”