Mount Sinai Receives $43 Million Grant for Study of Environmental Effects on Children’s Health

Researchers at the Icahn School of Medicine at Mount Sinai have been awarded a $43 million grant from the National Institutes of Health (NIH) to continue their work in a sweeping five-year research program called Environmental influences on Child Health Outcomes (ECHO). The national ECHO study aims to evaluate how a range of environmental factors, also known as the exposome, affect health during childhood, adolescence, and the transition into adulthood. At Mount Sinai, this work builds on the expertise and resources of the Institute for Exposomic Research, which is co-directed by two international leaders in the field, Rosalind J. Wright, MD, MPH, Horace W. Goldsmith Professor of Pediatrics, and Dean for Translational Biomedical Sciences at the Icahn School of Medicine; and Robert O. Wright, MD, MPH, Professor and Ethel H. Wise Chair of the Department of Environmental Medicine and Public Health.

“Exposomic research is changing the way medicine is practiced by finally addressing the largely unstudied role that our environment plays in our health—and doing so on the grandest possible scale,” says Dr. Robert Wright. In the ECHO program, institutions across the nation will study up to 50,000 families, investigating the influence of environmental exposures on four key areas: perinatal outcomes such as preterm birth; child growth and obesity; respiratory disorders; and neurobehavioral and cognitive difficulties that may affect social and academic functioning in the longer term. The Wrights are principal investigators of a

continued on page 3

A New Mount Sinai Partnership With The U.S. Military Gets Underway

A new Icahn School of Medicine at Mount Sinai admissions program for United States military personnel recently welcomed its first recruit: former Marine Lieutenant Chris Bellaire, who will join the Class of 2025 in September.

“The opportunity to apply when I was on active duty and then defer acceptance was so accommodating that it, honestly, changed my life,” says Mr. Bellaire, a Princeton University alumnus and former intelligence officer who supported Marine units engaged in tactical and special operations. Accepted to Mount Sinai’s program in March, he is currently attending a post-baccalaureate graduate program at Columbia University.

continued on page 2
All full-time active duty military personnel are eligible to apply to Mount Sinai if they have a baccalaureate degree from a U.S. or Canadian-accredited institution that is recognized by the U.S. Department of Education. The arrangement is similar to the Icahn School of Medicine’s popular FlexMed program, which allows college sophomores to apply for early assurance of acceptance to medical school. Students accepted through both FlexMed and the new military program do not take the Medical College Acceptance Test (MCAT).

Adjusting admissions requirements is rooted in evidence that students with “nontraditional” backgrounds match the performance of students who spend their college education immersed in science courses. Before taking their places in medical school, these aspiring physicians must complete one year of coursework in both biology and chemistry, a semester of physics, a semester of statistics, and one year of laboratory work in biology and/or chemistry. Admitted students are required to achieve a “B” in all required courses, and to maintain a cumulative GPA of 3.5. They must also log 100 hours of documented clinical service in nursing homes, clinics, or other patient facilities.

Military backgrounds enrich the pool of doctors, says David Muller, MD, Dean for Medical Education and the Marietta and Charles C. Morchand Chair in Medical Education at the Icahn School of Medicine at Mount Sinai. Medicine and service are inseparable, and service is paramount for women and men who are on active duty. “Through great efforts they give more than most of us can ever imagine giving in a lifetime,” Dr. Muller says. “They bring incredible talent, diverse knowledge, and unique skills to the learning environment and the health care workforce.”

Active duty often requires urgent decisions to be made under pressure, experience that is immensely valuable to doctors who work in emergency rooms, intensive care units, or operating rooms. “When you think about leadership, team building, discipline, maturity, and focus,” Dr. Muller says, “they embody the best of those attributes.”

Indeed, second-year Mount Sinai medical student Ray Tang says his experience as an infantryman in the Marines, serving two deployments in Afghanistan in 2011 and 2015, provided him with the “strict discipline and organization that has helped me stay on top of my schoolwork, while maintaining good health and work-life balance. The training and deployments improved my mental toughness and ability to stay calm in stressful, high-risk situations,” he says. In addition, the teamwork he experienced in the Marines has helped him work effectively with others, which is a critical component of delivering excellent patient care.

Reaching prospective students with news of Mount Sinai’s tailored admissions process for applicants on active duty has been somewhat challenging, says Dr. Muller. But it was his 2015 interview with National Public Radio about nontraditional paths to a medical education that actually caught the attention of Mr. Bellaire. “I thought the door to medical school had closed. Then I heard about a school that values nontraditional experience,” he recalls. A phone call to express his interest in Mount Sinai’s medical school reached Dr. Muller, who told him about the new initiative. Mr. Bellaire applied in the fall of 2017 and had an interview at Mount Sinai in March 2018, one week after completing his military service.

Albert Siu, MD, MSPH, Elected to the National Academy of Medicine

Albert Siu, MD, MSPH, chair emeritus of the Brookdale Department of Geriatrics and Palliative Medicine at the Icahn School of Medicine at Mount Sinai, has been elected to the National Academy of Medicine. This is considered one of the highest honors in health and medicine, and recognizes individuals who have demonstrated outstanding professional achievement and commitment to service.

“Dr. Siu is an exceptional leader in health policy research and medicine,” says 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. “His knowledge of aging and health care policy will be a tremendous asset to the National Academy of Medicine.”

After serving as the chair from 2005 to 2017 of the Brookdale Department of Geriatrics and Palliative Medicine, the nation’s first—and now largest—medical school department of geriatrics, Dr. Siu has dedicated himself full time to building and leading the nation’s most ambitious Hospital at Home program. Under Dr. Siu’s leadership, and with the support of an award from the Center for Medicare & Medicaid Innovation, the program has provided acute hospital-level care for nearly 800 patients who otherwise would have been treated in the hospital. “The Hospital at Home program has made a huge improvement in patients’ lives,” says Dr. Charney. “Its clinical outcomes show measurable reductions in patient readmissions, emergency department visits, and transfers to skilled nursing facilities.”

The Academy provides independent, objective analysis and advice on health issues, and its members are elected through a selective process. With the election of Dr. Siu, Mount Sinai has 21 current faculty members in the Academy.
During his stint in the Marines, and on his own time, Mr. Bellaire assisted in the emergency department and the intensive care unit of a hospital near the Marine Corps Base in Hawaii. While deployed in the Philippines, he confirmed his interest in global health and serving disenfranchised and vulnerable populations.

Seeing veterans with injuries and post-traumatic stress disorder helped spark Mr. Bellaire’s interest in medicine and steered him toward the Icahn School of Medicine’s Neuropathology Research Division Training Program, directed by John F. Crary, MD, PhD. While enrolled at Columbia, Mr. Bellaire is volunteering at Dr. Crary’s brain bank at Mount Sinai and learning about brain diseases in preparation for medical school next year.

Former infantry medic Thomas Fetherston, a first-year medical student and recipient of the F. Edward Hébert Armed Forces Health Professions Scholarship Program, approaches a career in medicine informed by his battlefield experience assisting injured soldiers in Afghanistan. The alarming frequency of suicide and suicidal thoughts among returning veterans has spurred his current interest in the use of ketamine for drug-resistant depression. “Dealing with people who have suffered losses has enabled me to better understand their stress and to understand the doctors who are at the end of the line for a lot of their patients,” he says. After medical school and residency, he plans to resume his army career.

Now a second-year Mount Sinai medical student, Brendan Bechard enlisted in the Marines in 2005. While stationed in Quantico, Virginia, and Okinawa, Japan, he maintained the military’s vital supply chain and enhanced unit readiness for operations throughout Southeast Asia. When his service ended, he earned a bachelor’s degree in neuroscience from Columbia University and subsequently performed research for the Traumatic Stress Studies Division, which is directed by Rachel Yehuda, PhD, Professor of Psychiatry, and Neuroscience, at the Icahn School of Medicine at Mount Sinai and the James J. Peters VA Medical Center in the Bronx.

“My interest in neuroscience is directly related to my service,” says Mr. Bechard, who leads the Icahn School of Medicine’s student group for military veterans. “It’s our duty as medical student-veterans to continue serving our sisters and brothers in arms.” In addition to furnishing a robust support community for all military veterans who work or study at the Mount Sinai Health System, the group encourages medical students to work with Veterans Affairs medical facilities in New York City.

Mount Sinai’s support for veterans has been incredibly encouraging, says Mr. Bellaire. “The new pathway program is an example of how the school really values diversity and service. It seemed like the perfect fit for me as I planned for my medical education after the military.”

Mount Sinai Receives $43 Million Grant for Study of Children’s Health (continued from page 1)

Regional ECHO consortium, including sites in New York City, Boston, and Virginia, that will study 5,000 women and children, measuring the exposome across their diverse ethnic backgrounds.

Mount Sinai has also received two related NIH grants, for a total of $19.4 million, that fund its participation in the Children’s Health Exposure Analysis Resource (CHEAR) program, which is designed to support ECHO. One CHEAR grant funds a Laboratory Hub, led by Dr. Robert Wright, which analyzes environmental chemicals, metabolites, hormones, and other factors. The other supports the Data Repository, Analysis, and Science Center, led by Susan Teitelbaum, PhD, Professor, Environmental Medicine and Public Health, which conducts big data analysis.

Across the nation, there are six CHEAR laboratory hubs, and one data center, at Mount Sinai. “ECHO and CHEAR are naturally synergistic programs,” says Dr. Robert Wright. “CHEAR will run exposomic assays on samples collected by ECHO that can identify thousands of chemicals to which children are exposed, and can systematically study which are toxic, which are harmless, and which are beneficial.”

In 2016, Mount Sinai won a large NIH grant during the development phase of ECHO, and since then Dr. Robert Wright and Dr. Rosalind Wright have been part of a select national committee that has shaped the program. Now they are helping set protocols for the researchers who will follow up with mothers and children at multiple stages of life—collecting samples of blood, urine, hair, saliva, and placental tissue, and gathering data on birth weight, preterm birth, growth, cognitive development, and lung development.

One overarching goal of the ECHO study is “solution-oriented research,” Dr. Rosalind Wright says. “We are not just looking for risk factors, we are also measuring factors that might be protective and build resilience. For example, there is evidence that higher intake of antioxidants such as vitamin C and anti-inflammatory fatty acids, like omega-3 fish oils, can buffer the effects of stress and other toxins. We are now looking at the effect of diet on exposure to air pollution and chemical toxicities,” she says. “People in the ECHO program are really excited—we are all in this because we want our research to inform better health.”
Commemeration and Achievement at Phillips School of Nursing

The Phillips School of Nursing at Mount Sinai Beth Israel welcomed the next generation of nurses to the profession in a joyous Commencement in August. The ceremony also marked another milestone—the first 27 students graduated from the school’s new Accelerated Bachelor of Science in Nursing Program (ABSN). In addition, Bachelor of Science in Nursing degrees were conferred on nine registered nurses.

“The accelerated entrance option responds to current health care needs and employment demands and enjoys great popularity among applicants,” said Todd F. Ambrosia, DNP, MSN, FNAP, Dean of the Phillips School of Nursing. “Interest in our ABSN program has greatly exceeded our expectations.”

It has been a year of achievement for the Phillips School of Nursing. In April, its Associate of Applied Science in Nursing Program was recertified by the Accreditation Commission for Education in Nursing through 2025, the maximum seven-year period. And in July, the school received its second consecutive four-year designation as a Center of Excellence in Nursing Education™ by the National League of Nursing in the category of “Enhancing Student Learning and Professional Development.”

A Team Approach at the Mount Sinai Thyroid Center at Union Square

A ribbon-cutting held Monday, October 15, celebrated the new Mount Sinai Thyroid Center at Union Square. Today, the Center offers patients a unified team approach to treatment of all thyroid conditions—all in one convenient location—allowing endocrinologists and surgeons to collaborate with colleagues in pathology, nuclear medicine, oncology, and other specialties.

From left: Iris Okang, Liane Xie, and Rena Pomrantz were among the first cohort to graduate from the Accelerated Bachelor of Science in Nursing program.

Lynne D. Richardson, MD, Professor of Emergency Medicine, and Population Health Science and Policy, and Vice Chair for Academic, Research and Community Programs at the Icahn School of Medicine at Mount Sinai, gave an inspiring keynote address. “I’ve been in health care for almost 40 years, and I have never regretted my decision to make taking care of patients an everyday part of my life,” Dr. Richardson said. “There is nothing you can choose to do that could bring you more satisfaction.”

Celebrating a 50th Anniversary

Hundreds of 50th anniversary branded T-shirts and nylon bags, along with cake and cupcakes, were handed out by the Office of Alumni Relations on Friday, October 19, to commemorate the dedication of the Mount Sinai School of Medicine, as it was known half a century ago. The event took place in the Annenberg North Lobby, where attendees could also visit a 50th anniversary historical display and “A Year in the Life of a Student: 1968 and 2018” exhibit sponsored by The Arthur H. Aufses, Jr. MD Archives & Mount Sinai Records Management Program.

From left: Iris Okang, Liane Xie, and Rena Pomrantz were among the first cohort to graduate from the Accelerated Bachelor of Science in Nursing program.

Hill the Arthur H. Aufses, Jr. MD Archives & Mount Sinai Records Management Program.

Celebrating a 50th Anniversary

Hundreds of 50th anniversary branded T-shirts and nylon bags, along with cake and cupcakes, were handed out by the Office of Alumni Relations on Friday, October 19, to commemorate the dedication of the Mount Sinai School of Medicine, as it was known half a century ago. The event took place in the Annenberg North Lobby, where attendees could also visit a 50th anniversary historical display and “A Year in the Life of a Student: 1968 and 2018” exhibit sponsored by The Arthur H. Aufses, Jr. MD Archives & Mount Sinai Records Management Program.
National Cancer Institute Leader Visits Mount Sinai

Aging is one of the greatest risk factors for developing cancer, which is most frequently diagnosed among people aged 65-74. But there are no simple explanations for the “multifaceted” science behind this connection, according to Norman E. Sharpless, MD, Director of the National Cancer Institute (NCI).

On Thursday, September 13, Dr. Sharpless addressed the topic in a seminar titled “The Dynamic Interplay between Cancer and Aging,” which he presented before a standing-room-only crowd in Davis Auditorium on The Mount Sinai Hospital campus. Dr. Sharpless has devoted much of his career to studying the connection between cancer and aging. Developing a better understanding of this relationship is particularly important, he said, because people over the age of 65 make up the fastest growing segment of the nation’s population.

Dr. Sharpless was invited to speak about his own research by The Tisch Cancer Institute at the Icahn School of Medicine at Mount Sinai, where he spent the earlier part of the day meeting with leaders of the Institute and medical school. He had lunch with postdoctoral fellows and students who work in Mount Sinai’s cancer-focused laboratories, and met with faculty and staff who oversee Mount Sinai’s Cancer Center Support Grant. The grant provides Mount Sinai with its NCI designation as one of an elite group of U.S. institutions committed to the research and treatment of cancer.

During the day’s meetings, Dr. Sharpless shared his vision for NCI programs and discussed trends in funding and cancer research. The Tisch Cancer Institute received its NCI designation for the first time in 2015 and is preparing to renew the competitive grant in 2019. Since his appointment to the NCI in 2017, Dr. Sharpless has spent time visiting NCI-designated cancer centers around the country. On his recent trip to New York City, he also visited the Albert Einstein Cancer Center.

Nurses Salute Physicians Who Excel as Partners in Care

Before an enthusiastic audience of faculty and staff, and family and friends, 15 physicians at The Mount Sinai Hospital were honored by nurse colleagues and Nursing leadership with the 51st Annual Physician of the Year Award. The ceremony, held Tuesday, September 25, at Stern Auditorium, is a yearly salute to physicians who excel in patient care and foster strong collaborative partnerships with nurses.

“All of the award winners are partners in care and have earned the respect and appreciation of the Mount Sinai community of nurses,” said Frances Cartwright, PhD, RN-BC, Edgar M. Cullman, Sr. Chair of the Department of Nursing, and Chief Nursing Officer and Senior Vice President for Patient Care Services, The Mount Sinai Hospital.

Nurses showed their appreciation of the award winners with speeches, videos, and PowerPoint presentations, set to pop music and filled with accolades like these: excellent communicator, team player, compassionate, hands-on, forward-thinking, engaged, approachable, and thorough in patient care. Gregory Serrao, MD, who won the Fellow Award, thanked the nurses he works with at Mount Sinai Heart, saying, “They have become friends, they have become mentors, and they are living examples of what it means to always put patients first.”

David L. Reich, MD, President and Chief Operating Officer, The Mount Sinai Hospital, said: “Every physician who was nominated by Mount Sinai nurses should feel a tremendous sense of pride for cultivating patient-care teams that promote clinical excellence.”

The 2018 individual honorees were Judah Sueker, MD, Chief Resident, Department of Emergency Medicine, House Officer Award; Gregory Serrao, MD, Mount Sinai Heart, Fellow Award; and Tao Xu, MD, Assistant Professor of Medicine (Hospital Medicine), Attending Award.

The Special Recognition Award was presented to the TeamSTEPPS Stroke Team in the Department of Neurology: Benjamin Brush, MD; Bradley Delman, MD; Gregory Fernandez, MD; Andy Jagoda, MD; Cappi Lay, MD; Peter Shearer, MD; Hazem Shoibrah, MD; Paul Singh, MD, MPH; Laura Stein, MD; Judah Sueker, MD; and Stanley Tuhrim, MD.
Mount Sinai Innovation Partners Presents Investor Panel

Experience a live-pitch presentation and hear from venture capitalists, angel investors, and Mount Sinai investment experts on how to find success. To register, email dov.shamir@mssm.edu.

Wednesday, November 14
5:30 – 7 pm
Hess Center for Science and Medicine
Seminar Room A

Grand Rounds / Anesthesiology, Perioperative and Pain Medicine

Amanda Rhee, MD, MS, Associate Professor, Anesthesiology, Perioperative and Pain Medicine, presents “Perioperative Safety Summit 2018.”

Wednesday, November 14
7:30 – 8:30 am
Stern Auditorium

The Charles Bronfman Institute for Personalized Medicine Seminar Series

Christina Leslie, PhD, Associate Member, Computational Biology Program, Memorial Sloan Kettering Cancer Center, presents “Decoding Epigenetic Programs in the Immune System.”

Wednesday, November 14
Noon – 1 pm
Hess Center for Science and Medicine, Davis Auditorium

Cell, Developmental and Regenerative Biology Seminar

Francesca Cole, PhD, Assistant Professor, Epigenetics and Molecular Carcinogenesis, The University of Texas, presents “Melosis and Chromosome Segregation in Mammals: Why Younger Isn’t Always Better.”

Thursday, November 15
Noon – 1 pm
Annenberg 25-51 Conference Room

Grand Rounds / Population Health Science and Policy

Loni Philip Tabb, PhD, Associate Professor, Epidemiology and Biostatistics, Dornsife School of Public Health, Drexel University, presents “Space + (Time) + Health = A Population Health Approach to Understanding the Impact of Factors and Demographics on Overall Health in the U.S.” Co-sponsored by ConduITS, the Institutes for Translational Sciences, and the TLI Training Program at Mount Sinai.

Tuesday, November 20
1 – 2 pm
Icahn Medical Institute, Goldwurm Auditorium

Pediatric Endocrinology and Diabetes Hosts 17th Annual Symposium

The Division of Pediatric Endocrinology and Diabetes is hosting a symposium for all clinicians interested in understanding recent advances in the care of transgender youth, and youth with diabetes and growth disorders. Participants will learn about pathophysiology, treatment goals and methods for diabetes and growth disorders, and current issues related to the care of transgender youth. For more information, or to register for the event, email cme@mssm.edu.

Monday, November 12
8:15 am – 12:30 pm
Hess Center for Science and Medicine
Davis Auditorium

Mount Sinai Transformation Update

For the most recent updates on Mount Sinai’s downtown transformation, please go to:
http://www.mountsinai.org/locations/downtown

The New Mount Sinai Brand Center

www.mountsinaibrandcenter.org

This online resource now gives you easy access to all of Mount Sinai’s brand-related marketing and communication tools and assets, such as new and revised guidelines; logos and templates; and forms for branded signage.

Visit www.mountsinaibrandcenter.org to help ensure a consistent expression of our brand.

Learn About Lung Health

Join the Mount Sinai Lung Screening team for a “Lungs for Life” event that occurs during Lung Cancer Awareness Month in November. Stop by Guggenheim Atrium to learn about lung health, and the importance of lung screenings for current and former smokers. Participants will also be able to walk through a large inflated model of a pair of lungs. To learn more about the lung screening program, visit www.mountsinai.org/lungscreening.

Monday, November 12
8 am – 3 pm
Guggenheim Atrium

Mount Sinai

Transformation Update

For the most recent updates on Mount Sinai’s downtown transformation, please go to:
http://www.mountsinai.org/locations/downtown