The Tisch Cancer Institute Receives a $10 Million Grant to Study Acute Graft-Versus-Host Disease

Physician-scientists at The Tisch Cancer Institute have been awarded $10 million from the National Cancer Institute to continue their novel research into therapies that improve the standard of care for patients who develop acute graft-versus-host disease (GVHD) following bone marrow transplantation. Bone marrow transplantation (BMT) is often successfully used to treat diseases such as leukemia and lymphoma. Acute GVHD, which affects approximately 50 percent of patients, occurs when the donor’s immune cells attack the patient’s tissues, producing potentially fatal results.

Led by world-renowned GVHD researchers James L. Ferrara, MD, DSc, and John E. Levine, MD, the five-year grant will enable the Icahn School of Medicine at Mount Sinai to spearhead a consortium of 20 major medical centers in the United States and Europe that will share patient data. With Mount Sinai coordinating the information, the researchers plan to examine blood samples from 1,000 bone marrow transplant patients each year to learn more about the disease and refine new diagnostics and treatments. U.S. participants will include Massachusetts General Hospital, Mayo Clinic, the Ohio State University Medical Center, and Vanderbilt University Medical Center. Several German academic medical centers,

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Beginnings, and a Return, at 19th White Coat Ceremony

Each year the Icahn School of Medicine at Mount Sinai holds a joyous and celebratory event, giving white coats to its newest class of students before a gathering of faculty, family, and friends. But this year, the 19th annual ceremony for the Class of 2020 took on added resonance. It marked the return of Dennis S. Charney, MD, who was injured in a shooting in August while leaving his favorite coffee shop in Chappaqua, N.Y.

“This ceremony is the first time I’ve returned since the attack,” said Dr. Charney, Anne and Joel Ehrenkranz Dean, Icahn School of Medicine at Mount Sinai, and President for Academic Affairs, Mount Sinai Health System, who was greeted with a standing ovation in Stern Auditorium on Thursday, September 15. He thanked the police officers who assisted him and the Mount Sinai team who cared for him, including doctors, nurses, security staff, and housekeepers, and said, “During this time, I’ve reflected

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Clara Koo, left, and Sayeeda Chowdhury, were two of the 140 students starting their medical journey with new white coats and stethoscopes.

James L. Ferrara, MD, DSc
Beginnings, and a Return, at 19th White Coat Ceremony (continued from page 1)

At the ceremony, Dennis S. Charney, MD, spoke candidly about his injury and about the trials and rewards of being a doctor. To see his speech, go to: icahn.mssm.edu/whitecoat2016.

The Class of 2020 recited their Student Oath, which they wrote collaboratively.

At the ceremonial start of their medical education, Dr. Charney assured the students that as doctors they would face many difficult moments. “Being a doctor means coping with loss and disappointment on a daily basis. Many of your patients will not get better. Some will die. Too few will be cured. Sometimes we lose one of our own. Yes, being a doctor is tough. Yet let me also be among the first to tell you it can be incredibly rewarding. In fact, the same elements that make it difficult are often what make it worthwhile.”

Students were also given a sense of perspective by the event’s keynote speaker, Jewel Mullen, MD, MPH, MPA, Principal Deputy Assistant Secretary for Health at the U.S. Department of Health and Human Services. Dr. Mullen has spent 39 years as a physician and epidemiologist in a career that has spanned clinical, research, teaching, and administrative roles, including Commissioner of the Connecticut Department of Public Health. But she said her core values as a doctor were forged early on, when she was a student at the Icahn School of Medicine at Mount Sinai.

In those years, she looked out for a neighbor and classmate with type 1 diabetes who had asked for her help. Dr. Mullen said, “He told me his parents needed someone to call in case he didn’t answer their morning call. He explained what might happen in the case of hypoglycemia; he told me when to give him orange juice with sugar, when to use glucagon, when to call 911.”

She said that she was humbled by the trust her classmate placed in her and that she got a sense of what it meant to be a doctor “even before I saw my first patient, even before I got my first white coat. I believe that our professional calling is one that makes empathy a permanent part of us, no matter what we do as doctors. I believe that caring, authenticity, and empathy should remain at the core of what we do as doctors.”

The Class of 2020 expressed such values “beautifully” in the code they wrote jointly and recited together at the ceremony, Dr. Mullen said. In the oath, students pledged “to promote a culture of wellness and mindfulness for ourselves, our peers, and the communities we serve; to be humble agents of change in the pursuit of equitable care; to actively challenge discrimination at large and bias within ourselves; and to reflect upon our own limitations, and those of the medical tradition, using them as catalysts for learning and progress.”

Dr. Charney told students that in accepting their new white coats and stethoscopes they were not being inducted into an “elite community of doctors, but instead into a community of everyday people who vow to live by a code of honor.”

“Finally,” he said, “I know bad stuff does happen. A bad thing happened to me. You will face tough times, but if you stay the course, nose to the grindstone, eyes to the stars, ultimately you will emerge further down the road tougher than the rest.”
The Tisch Cancer Institute Receives a $10 Million Grant (continued from page 1)

including University Hospital Regensburg, also will be sharing data with Mount Sinai.

“Our grant proposal was very enthusiastically received by the National Cancer Institute, which was impressed with the support that Mount Sinai has provided to run this international consortium,” says Dr. Ferrara, the Ward-Coleman Chair in Cancer Medicine and Professor of Medicine (Hematology and Medicine Oncology), Pediatrics, and Oncological Sciences.

Dr. Levine is a Professor of Medicine, and Pediatrics, at the Icahn School of Medicine at Mount Sinai. He and Dr. Ferrara have been long-time colleagues in the study of GVHD, first at the University of Michigan and for the past couple of years at Mount Sinai, where their groundbreaking research is now being used to inform patient care.

Early diagnosis is the key to successfully treating GVHD, says Dr. Ferrara. To that end, he and Dr. Levine have discovered and validated a biomarker signature in the blood of two plasma proteins that can predict which patients will develop the most severe disease. They are now testing a new treatment that, if given early enough, should keep the disease from spreading through the patient’s gastrointestinal tract to the rest of the body, which is the normal course that GVHD takes.

With the new protocols in place, Mount Sinai has become the first health system in the world to test patients for early signs of GVHD—usually within the first month after a bone marrow transplant—and to offer them the new treatment. Mount Sinai recently treated its first high-risk patient with positive results.

“This is the beginning of precision medicine for BMT patients,” Dr. Ferrara says.

For the past 40 years, physicians have treated patients with a range of high-dose steroids that differed in type and dose, depending on the medical center. The large number and variety of centers participating in the consortium will allow clinicians to standardize the treatment of GVHD for the first time.

Target Cell Destruction During Graft-Versus-Host Disease (GVHD) in the Gastrointestinal Tract

A gastrointestinal crypt is under attack from donor T cells (red globules), which destroy intestinal stem cells (ISCs) and adjacent Paneth cells that protect them. When the ISCs disintegrate, bacteria (enterococcus, bacillus) from the intestinal lumen enter the bloodstream, causing widespread infection and inflammation. An antimicrobial peptide made by Paneth cells (Reg3a) also enters the bloodstream at the same time, acting as a biomarker of crypt damage.

Dr. Ferrara’s $10 million grant will explore the biological properties of biomarkers such as Reg3a, and new clinical trials to treat patients at high risk of severe gastrointestinal GVHD.
Yuval Waldman, a renowned violinist and conductor, recently performed an original song to thank the Mount Sinai St. Luke's Cardiac Care Team that treated him for atrial flutter and artery blockage. He was admitted to the hospital's cardiac intensive care unit with severe shortness of breath, swollen legs, high blood pressure, and an irregular, fast heart rhythm. Testing revealed that he was in severe heart failure. Emad F. Aziz, DO, MB, CHB, Clinical Cardiac Electrophysiologist, Al-Sabah Arrhythmia Institute, Mount Sinai St. Luke's, performed an atrial flutter ablation that repaired an abnormal conduction pathway. When further tests revealed a blockage in the arteries supplying the heart, stents were placed to improve blood flow. Mr. Waldman performed the impromptu song in June, on the day he was released from the hospital. To view the video, please visit: youtube.com/StLukesHospitalNYC.

The violinist Yuval Waldman with the Mount Sinai St. Luke's team, from left: Alan S. Multz, MD, Chief Medical Officer; Leonida Lacdao, RN, Nurse Manager; Emad F. Aziz, DO, MB, CHB; and Eyal Herzog, MD, Director, Cardiac Care Unit, and Director, Echocardiography Laboratory.

The Mount Sinai Health Partners (MSHP) team, at 150 E. 42nd Street, assembled 16 bicycles recently for donation to the Children's Aid Society. “Every year, MSHP engages in a team-building activity, and this year we looked for an opportunity to do something fun that also resulted in doing something charitable that promotes healthy living to support the communities we serve,” says Niyum Gandhi, Executive Vice President and Chief Population Health Officer, Mount Sinai Health System. In a team exercise before building the bikes, the participants worked together to answer trivia questions and create short videos. Several children supported by the Children's Aid Society pitched in to build and decorate the bikes. Mount Sinai Health Partners is the population health team that fosters partnerships with health plans, physicians, employers, and community organizations to offer patients a more effective and efficient health care experience through its practice transformation, physician engagement, and care coordination efforts.

Teaming Up to Build Bikes

Violinist’s Impromptu Thank You at Mount Sinai St. Luke’s

Advancing Treatment for Rare Endocrine Disorder

Patients and caregivers from around the globe gathered to learn about the latest surgical approaches, including minimally invasive, endoscopic, and robotic techniques, to treat multiple endocrine neoplasia—a rare inherited condition that affects the body's network of hormone-producing glands—at a recent seminar hosted by the Mount Sinai Department of Surgery. Mount Sinai is recognized as a national leader in treating this disorder. The event was organized by the American Multiple Endocrine Neoplasia Support group. Participants were able to interact with surgeons, endocrinologists, and geneticists from the Mount Sinai Multiple Endocrine Neoplasia Integrated Team, as well as with visiting faculty from the MD Anderson Cancer Center. For additional information, visit: www.surgerymountsinai.org.

At the seminar, William B. Inabnet III, MD, Chairman, Department of Surgery, Mount Sinai Beth Israel and Mount Sinai Brooklyn, far right, gathered with, from left: Hyunsuk Suh, MD, Assistant Professor, Surgery; patient Linda Annicchiarico; and Linda Hageman, RN, Founder, American Multiple Endocrine Neoplasia Support group.
More than 120 high school, college, and graduate students aspiring to careers in medicine, science, hospital administration, and Information Technology (IT) participated in a variety of internships and talent pipeline programs offered throughout the Mount Sinai Health System during the summer. Supported by the Office for Diversity and Inclusion (ODI) and the Icahn School of Medicine at Mount Sinai’s Center for Excellence in Youth Education (CEYE), these initiatives continue a long-standing commitment of providing opportunities to students of underrepresented backgrounds in medicine, science, and technology.

“My experience gave me a fresh look at health care,” says Emily Jweid, a student in the MBA program at Wagner College in Staten Island and one of five Greater New York Hospital Association administrative interns who attended an ODI-sponsored roundtable with Kenneth L. Davis, MD, President and Chief Executive Officer, Mount Sinai Health System. ODI interns, who also came from the All Stars Project, Inc.; Committee for Hispanic Children and Families; and Prep for Prep, additionally met with hospital presidents and Gary C. Butts, MD, Chief Diversity and Inclusion Officer, Mount Sinai Health System, and Dean of Diversity Programs and Policies at the Icahn School of Medicine at Mount Sinai.

Ten interns, among them Luis Santos, a senior at Chelsea Career and Technical High School, also participated in ODI’s new IT Talent Pipeline Program. Luis was especially inspired after meeting Kumar Chatani, MBA, Chief Information Officer, Mount Sinai Health System, and says he can now better shape his college major and future career path.

This summer also marked the start of the Mount Sinai Health System’s Administrative Fellowship Program. The first cohorts, Christina Cellante, MHA, and Jean-Luc Coletta, MHA, at Mount Sinai Beth Israel, and Michelle Kang, MHA, and Elizabeth Persaud, MPH, at Mount Sinai St. Luke’s, began their two-year tenure as administrative fellows in July. Ms. Persaud, an alumna of CEYE’s Hospital Placement program and a 2015 MPH graduate of the Icahn School of Medicine at Mount Sinai, says she plans to use her knowledge to bridge the gap between the hospital and community and eliminate disparities in care.

CEYE’s six-week summer research and clinical internship programs attracted 96 high school students from across New York City. Students were selected to participate in either the Fruit Fly Genomics, Environmental Health: Zebrafish Toxicology, or Nanotechnology research course; the Hospital Placement clinical internship program; or the Lloyd Sherman Scholars program, a two-year biomedical research program for young men of color.

CEYE’s research courses met daily, and students received lecture-based instruction coupled with hands-on laboratory activities in a School of Medicine teaching laboratory, where projects included examining nicotine addiction in fruit flies and using music to test zebrafish startle reactions. Hospital Placement students were matched with faculty and staff and shadowed them as they performed their jobs in various departments throughout The Mount Sinai Hospital, while Lloyd Sherman Scholars were placed in mentored research labs.

Jaileen Pierre-Louis, a Fruit Fly Genomics participant, shared her summer experience: “Over the course of the school year, I don’t get to participate as much in science. This program definitely reaffirmed my career preference by reminding me how much I love science.”
2nd Annual Organ Donor Enrollment Day
In an effort to increase organ donor enrollment in the New York Metropolitan area, LiveOnNY is partnering with the Mount Sinai Health System to host donor registrations at multiple hospital campus locations. To learn more details, email Lauren Muskauski at lmuskauski@liveonny.org or René Mascoll at rmascoll@liveonny.org.

Thursday, October 6
9 am – 5 pm

Grand Rounds / Obstetrics and Gynecology
Raymond Sandler, MD, Associate Professor, Obstetrics, Gynecology and Reproductive Science, and Loraine O’Neill, RN, MPH, Clinical Program Manager, The Mount Sinai Hospital, present “Enhanced Communication.”
Tuesday, September 27
8 – 9 am
Mount Sinai West
Conference Room 2B

Carl H. Nacht Memorial Lecture
Ashish Atreja, MD, MPH, Assistant Professor and Chief Technology Engagement and Innovation Officer, Department of Medicine, presents “The Electronic Medical Record 15 Years On—What Has Technology Wrought?”
Thursday, September 29
7:45 am
Mount Sinai St. Luke’s
Muhlenberg Auditorium

Charles Bronfman Institute for Personalized Medicine Seminar Series
Alkes Price, Associate Professor, Statistical Genetics, Department of Epidemiology, Biostatistics, Harvard T.H. Chan School of Public Health, presents “The LD-Dependent Architecture of Complex Traits.”
Friday, September 30
Noon – 1 pm
Annenberg 18-85

Grand Rounds / Medicine
Daniella Kadian-Dodov, MD, Assistant Professor, Medicine (Cardiology), presents “Cervical Artery Dissection/Spontaneous Coronary Artery Dissection.”
Tuesday, October 4
8:30 – 9:30 am
Hatch Auditorium

5th Annual SINAInnovations
Leading a New Era of Discovery
Theme: Therapeutic Discovery
Email: Sinainnovations@mssm.edu
http://icahn.mssm.edu/about/sinainnovations
Tuesday, October 25 – Wednesday, October 26
Stern Auditorium

1st Annual SINA MedMaker Challenge
Creating Novel Technology Solutions for Health Care
Theme: Pain & Fatigue
A 48-hour health-related challenge involving multidisciplinary teams exploring novel solutions for the management, monitoring, and/or treatment of pain and fatigue.
Email: sinaimedmaker@mssm.edu
http://icahn.mssm.edu/about/sinainnovations/sinaimedmaker
Friday, October 21 – Sunday, October 23
Annenberg West Lobby

4th Annual Trainee Forum and Networking Reception
(including the 2nd Annual Young Innovators Pitch Competition)
http://icahn.mssm.edu/about/sinainnovations/networking
Tuesday, October 25
Hess Center for Science and Medicine

Registration is required for all events.

#sinaimedmaker #sinainnovations