



2023 Year in Review

Another year of achievement has passed at Mount Sinai. In 2023, our faculty and students exemplified Mount Sinai's spirit of ambitious innovation and excellence in research, clinical care, and medical education. Your support is integral to our continued efforts to relentlessly advance human health, and we are pleased to share a selection of accomplishments from the past year bolstered by our community.

Exciting Advances

- Continuing its legacy of driving innovative research, the Icahn School of Medicine at Mount Sinai launched a new **Institute of Regenerative Medicine** to pursue advancements in the replacement, engineering, and regeneration of human cells, tissues, and organs to transform human health. Led by Sarah E. Millar, PhD, the Institute's work holds tremendous potential for treating—and even curing—diseases such as Alzheimer's, breast cancer, leukemia, and airway diseases.
- A team led by Praveen B. Raju, MD, PhD, Co-Director of the Children's Brain and Spinal Tumor Center, **developed a new drug delivery approach to enable more effective and precise delivery of anti-cancer drugs to treat brain tumors in children.** By targeting an immune mechanism that moves white blood cells throughout the body, the team used a unique feature found within brain tumor blood vessels to deliver drug-loaded nanoparticles directly to the site of disease. This approach enhanced the efficacy of an anti-cancer medication used in medulloblastoma—the most common malignant pediatric brain tumor—that is highly aggressive and difficult to treat. Bolstered by a recent \$2.8M award from the National Institutes of Health, Dr. Raju will continue investigating this method to improve the efficacy of several existing approved and experimental therapeutics.
- Mount Sinai's Department of Rehabilitation and Human Performance announced an **expansion of the Cohen Center for Recovery From Complex Chronic Illnesses.** Leveraging its expertise in the management of Long COVID, the Center's expanded scope will include the research, diagnosis, and treatment of Long Lyme Disease/Lyme+ and other infection-associated complex chronic illnesses. Researchers will also investigate the similarities and differences between this set of illnesses and Long COVID to help develop and test novel therapies for these debilitating conditions.

- To better serve our communities and mission, Mount Sinai opened three new facilities this year: the **Mount Sinai-Behavioral Health Center** on the Lower East Side delivers comprehensive behavioral health resources; the **Mount Sinai-Harlem Health Center**, a new multispecialty practice, offers the physical, mental, and specialized services most requested by Harlem residents; and the **Discovery and Innovation Center** on Eleventh Avenue augments our state-of-the-art research capabilities, with a focus on genomics, regenerative medicine, and drug discovery.
- Mount Sinai's new **Center for Ophthalmic Artificial Intelligence and Human Health is one of the first entities in the United States dedicated to leveraging the potential of artificial intelligence, data science, and imaging to achieve breakthroughs in ophthalmic care.** In partnership with the Windreich Department of Artificial Intelligence and Human Health, will develop population health and value-based models to advance the New York Eye and Ear Infirmary of Mount Sinai's mission of reducing vision care service disparities.
- A multi-institutional study led by Icahn Mount Sinai postdoctoral fellow Daniel Greene, PhD, **identified the genetic causes of primary lymphedema, thoracic aortic aneurysm disease, and congenital deafness—three unexplained rare diseases.** The study, which appeared in *Nature Medicine*, utilized a computational framework to examine data from tens of thousands of rare disease patients and find new associations between genes and rare diseases, paving the way for potential therapeutic targets.
- Building upon Mount Sinai's long history of immunological research, the **Department of Immunology and Immunotherapy** was established in June 2023. Led by Miriam Merad, MD, PhD, and Brian D. Brown, PhD, and working closely with the Icahn Genomics Institute and the Marc and Jennifer Lipschultz Precision Immunology Institute, the Department will elevate fundamental immunology research by bringing together the expertise of immunologists and immune engineers from across the Health System.
- Four medical students at Icahn Mount Sinai are **challenging traditional medical education models that they argue omit a crucial aspect: preparing students for the experience of segregation within health care.** In an article published in the *AMA Journal of Ethics*, the students define segregated care as care segregated by insurance status, effectively translating to racial segregation. Using quantitative data, they provide examples of how insurance status disparities—particularly affecting Black Americans—impact patient care and outcomes. The revised curriculum suggested by the students includes mandatory presentations supplemented by optional extracurricular activities and discussions that aim to raise awareness and engage peers in addressing the issue of segregated care.

- With the Gottesman Family's generous commitment to establish the **David S. and Ruth L. Gottesman Center for Headache and Translational Research**, researchers are breaking down barriers to improve the lives of patients experiencing chronic headaches, migraines, and other painful disorders of the skull, brain, and face. Led by Bridget Mueller, MD, PhD, dedicated specialists within the Gottesman Center are using state-of-the-art technology to deliver advanced treatments and therapeutic procedures to combat headache pain.
- Mount Sinai Heart is now known as **Mount Sinai Fuster Heart Hospital**, in honor of Valentin Fuster, MD, PhD. This name change celebrates Dr. Fuster's illustrious career and his many contributions to Mount Sinai and the field of cardiology. The Fuster Heart Hospital is among the world's leading enterprises for cardiovascular medicine and will continue to advance a collaborative and comprehensive approach to the prevention and treatment of heart disease.

New Leadership



Brendan Carr, MD, was appointed Chief Executive Officer of the Mount Sinai Health System. A nationally recognized leader in emergency medicine and health policy, Dr. Carr will oversee all critical strategic and operational areas of the Health System. Dr. Carr joined Mount Sinai as Chair of Emergency Medicine in early 2020, shortly before New York City became the epicenter of the COVID-19 pandemic in the United States. He has devoted his career to building regional systems of emergency care and developing innovative solutions to create a more accessible acute care delivery system. A visionary leader, Dr. Carr will undoubtedly chart an exciting course ahead for Mount Sinai. As Dr. Carr moves into his new role, Kenneth L. Davis, MD, will become Executive Vice Chairman of the Mount Sinai Boards of Trustees.



Michal Elovitz, MD, was appointed the first Dean for Women's Health Research and Director of the Women's Biomedical Research Institute (WBRI) at Icahn Mount Sinai. In her role, Dr. Elovitz aims to advance women's health science and make key biological discoveries that will improve the health of women across their lifespan. With the newly-created WBRI and Dr. Elovitz's visionary leadership, multidisciplinary teams in microbiology, reproductive immunology, and uterine biology will come together to deliver groundbreaking research and develop new therapies.

New Leadership



Cardinale B. Smith, MD, PhD, and **Ashutosh Tewari, MBBS, MCh**, were named Chief Medical Officer and Surgeon-in-Chief, respectively, of Mount Sinai's new Tisch Cancer Hospital, which is under development and due to open in 2028. Under the leadership of Drs. Smith and Tewari, the Tisch Cancer Hospital will be a state-of-the-art cancer facility that will transform oncologic care, expand access to life-saving breakthroughs, and promote Mount Sinai as a leader in cancer research and treatment.



Kimberly Glassman, PhD, RN, was appointed Dean of the Mount Sinai Phillips School of Nursing (PSON) and Vice President for Nursing Academic Affairs of the Mount Sinai Health System. Prior to joining Mount Sinai, Dr. Glassman held the positions of Senior Associate Dean of Academic Affairs and Clinical Professor at New York University's Rory Meyers College of Nursing. At Mount Sinai, Dr. Glassman will identify new areas of growth for PSON, develop a regional model for addressing the front-line nursing shortage, and continue to strengthen PSON's relationships across the Health System.

Awards and Recognition

- **Becker's Hospital Review** featured **The Mount Sinai Hospital on its "2023 Great Hospitals in America" list**, citing our 11 nationally ranked specialties and consistent "Best Hospital" rankings by *U.S. News & World Report*. *Becker's* praised Mount Sinai as the first hospital in New York City to receive advanced certification as a Comprehensive Stroke Center by The Joint Commission, and for earning the Centers for Medicare & Medicaid Services award for health care innovation after opening the first geriatric emergency department in New York City. **Mount Sinai also ranked fifth on Newsweek's "World's Best Smart Hospitals" list**, which recognizes hospitals that stand out for their use of smart technologies. Mount Sinai was lauded as a standout in the categories of electronic functionalities, telemedicine, and robotics.
- **Miriam Merad, MD, PhD, an esteemed immunologist, has been elected into the National Academy of Medicine (NAM) for her pioneering contributions to the fields of immunology and cell biology.** Her transformational discoveries have had a profound impact on medical

treatments, and her continued work focuses on uncovering the many complex responses of the human immune system to disease. With her appointment to the NAM, Dr. Merad joins an elite group of scientists and Academy members—including 25 Mount Sinai faculty members—in receiving one of the highest honors a scientist can earn in health and medicine.

- Mount Sinai's Kravis Drug Discovery Institute is the driving force behind our efforts to develop new drugs that result from basic and clinical research programs across the Health System and to accelerate therapeutic assets at key points in their development. A prime example of this work is the early success of CastleVax Inc., a clinical-stage vaccine research and development company. **Excitingly, CastleVax was selected to receive an award valued up to \$338 million to advance its intranasal COVID-19 booster vaccine from the Biomedical Advanced Research and Development Authority**, part of the U.S. Department of Health and Human Services. This award will enable CastleVax to transition this intranasal vaccine to a significantly larger clinical trial, a major step forward in its development.
- In October, The Tisch Cancer Institute's **multiple myeloma research team earned a \$7M grant from the Multiple Myeloma Research Foundation**. This grant, which will run through March 2027, supports our efforts to deeply investigate disease outcomes in individuals with high-risk multiple myeloma, many of whom experience early disease progression and an overall decrease in survival, despite the significant advances that have been made in multiple myeloma treatment over the years.

Thank You

Your partnership empowers us to break new ground in science and medicine, foster innovation, and enhance the well-being of patients and communities around the world. Please know that your belief in our vision and your commitment to making a positive impact inspire us every day. **Thank you for being an integral part of Mount Sinai and for shaping the future of health care.**

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