The Tisch Cancer Institute at The Mount Sinai Medical Center

Innovative research and care to prevent, detect, and treat cancer
With vision, commitment, and exceptional expertise, The Tisch Cancer Institute at The Mount Sinai Medical Center is emerging as an innovative leader in cancer care and research. Through a range of groundbreaking programs spanning prevention, detection, and treatment, The Tisch Cancer Institute builds on Mount Sinai’s extraordinary history of promoting translational medicine to offer new hope for those living with or at risk for any of a wide range of cancer types.

Cancer is an insidious disease. The more we learn about cancer, the more we realize how complex a disease it is. We are working to unravel these complexities with the goal of developing more targeted, effective treatments. This requires innovative thinking from brilliant minds in a supportive environment. Mount Sinai’s unified structure is perfectly suited to forming the close collaborations between basic and clinical researchers and clinicians that will lead to breakthrough science.”

Steven J. Burakoff, MD

Dr. Burakoff, Director of The Tisch Cancer Institute and Professor of Medicine and Oncological Sciences, is a nationally recognized leader in cancer immunology. Prior to joining Mount Sinai, he was Chair of the department of pediatric oncology at Dana-Farber Cancer Institute in Boston, and Director of New York University’s Cancer Institute, guiding it to designation as a National Cancer Institute Cancer Center.
Cancer is one of the most pressing health concerns of our time. It transcends geographic and socioeconomic borders and touches us all. The Mount Sinai Medical Center is building upon its tradition of translational medicine and making a major commitment to enhancing clinical and research programs so that we can accelerate the development of novel cancer therapeutics. We believe this institute will enable Mount Sinai to revolutionize how cancer is diagnosed and treated, and also set a new standard for the care of cancer patients.”

James S. and Merryl H. Tisch, EdD

Mount Sinai has long played a prominent role in advancing cancer care and research. Mount Sinai clinician-researchers have made a number of critically important contributions to the field, including:

- Identifying asbestos as a carcinogen
- Proving the effectiveness of differentiation therapy for hematological cancers
- Pioneering computer-assisted stereotactic techniques that help pinpoint operable brain tumors

In spite of these and many other advances in cancer research and treatment, cancer remains the second most common cause of death in the U.S., exceeded only by heart disease. According to the American Cancer Society, one out of every four deaths in the U.S. is cancer-related.

Though research has yielded many successes to date, cures for cancer are still elusive. So long as survival rates are measured in such short terms as five years, more aggressive and ambitious research efforts must continue.

With the establishment of The Tisch Cancer Institute, Mount Sinai takes on the challenge of bringing cancer research to the next level – moving towards a cure or towards the ability to control cancer as a chronic disease. Harnessing the skills and expertise of Mount Sinai physicians, researchers, and educators from numerous disciplines and departments – and by utilizing advanced imaging techniques, stem cell research, and genetics to develop and deliver safer, more effective therapies – The Tisch Cancer Institute will operate at the vanguard of cancer care and research in the 21st century.

Mount Sinai is committing significant resources to ensure that The Tisch Cancer Institute is equipped with extraordinary talent, facilities, and programs. But we need your support. We urge you to help The Tisch Cancer Institute advance and sustain its essential work.


Our Benefactors

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James S. and Merryl H. Tisch, EdD

Dr. Tisch is vice chancellor of the New York State Board of Regents.

Mr. Tisch is CEO of Loews Corporation, a Trustee of Mount Sinai, and Chair of The Campaign for Mount Sinai.
Often spoken of as one disease, cancer actually encompasses a range of diagnoses. Different types of cancer have unique pathologies, prognoses, and treatments. Cancer research, therefore, must be a broad effort, advancing simultaneously on multiple fronts.

At Mount Sinai, we channel our research activities over seven cancer categories—not just the two or three that are most prevalent and popularly funded. In every category, our approach is innovative and multidisciplinary, focusing on the integration of personalized care with translational research.

**Blood Cell Disorders**
Mount Sinai has a long history of excellence in the research and treatment of hematological (blood) cancers, especially in the leukemias. Our bone marrow transplant program, led by Dr. Luis Isola, Associate Professor of Medicine (Hematology and Medical Oncology), is the second-largest in the New York City area. In addition, Mount Sinai serves as the lead clinical site for an international, multicenter study of myeloproliferative disorders (MPDs) that is funded by the National Cancer Institute and directed by Dr. Ronald Hoffman, the Director of the Myeloproliferative Disease Program, the Albert A. and Vera G. List Professor of Medicine, and Professor of Medicine (Hematology and Medical Oncology) and Gene and Cell Medicine. MPDs are a group of bone marrow disorders that progress to leukemia. Another preleukemic condition, myelodysplastic syndrome (MDS), is the focus of Dr. Lewis Silverman, Associate Professor of Medicine (Hematology and Medical Oncology) and Assistant Professor of Oncological Sciences. Dr. Silverman has served as Principal Investigator for several national clinical trials exploring treatments for patients with MDS, and has brought forward for FDA approval the first drug that is effective in treating MDS. In addition, Dr. Louis Aledort, The Mary Weinfeld Professor of Clinical Research in Hemophilia and Professor of Medicine (Hematology and Medical Oncology), is a nationally recognized expert in bleeding and clotting disorders, which often affect cancer patients undergoing treatment.

**Brain Cancer**
Perhaps more than any other form of cancer, brain cancer poses daunting clinical challenges, since available treatments can produce significant side effects. Mount Sinai champions minimally invasive techniques that help patients maintain the best possible quality of life while effectively treating their tumors. Dr. Isabelle Germano, Professor of Neurology, Neurosurgery, and Oncological Sciences, is a pioneer of computer-assisted image-guided neurosurgery, having literally written the book on the subject (*Advanced Techniques in Image-Guided Brain and Spine Surgery*, 2002). This technique allows surgeons to perform stereotactic radiosurgery on brain and spine tumors with no surgical incision and minimal effect on surrounding tissue. Mount Sinai is also actively performing translational research focusing on gene therapies and—through The Black Family Stem Cell Institute, led by Dr. Ihor Lemischka—the use of stem cells to treat astrocytomas, a type of brain tumor.

**Breast Cancer**
Combining personalized care with groundbreaking research, Mount Sinai is transforming the patient experience while staying on the forefront of the fight against breast cancer. Our new 15,000-square-foot Eva and Glenn Dubin Breast Care Center, headed by world-class medical oncologist Dr. George Raptis, Associate Chief for Solid Tumors in the Division of Hematology and Medical Oncology and Associate Professor of Medicine, will provide clinical investigators and patients with critical access to one another, facilitating the translational research that helps foster medical breakthroughs and, ultimately, improves
care for all. One avenue of current breast cancer research addresses the fact that the majority of breast cancer fatalities result from metastasis – the migration of breast cancer cells to secondary sites such as the lung. Recent studies at Mount Sinai with fruit flies and mice are testing novel methods of inhibiting proliferation of these cells.

**Head and Neck Cancers**

Led by Dr. Eric Genden, Professor and Chair of Otolaryngology and Chief of the Division of Head and Neck Oncology, a widely recognized expert in head and neck cancer surgery and microvascular reconstruction, Mount Sinai’s surgical, radiation, and medical oncology experts have propelled the Medical Center to the front ranks in this area. Dr. Genden has the distinction of being the first surgeon to perform a total jaw transplant. This landmark operation was also the first total jaw transplant to combine a donor jaw with bone marrow from the recipient. Dr. Genden and his team also use minimally invasive endoscopic surgical techniques, including robot-assisted surgery, to treat oral and laryngeal tumors without the need for external incisions. In addition, our researchers are staging Phase I clinical trials that use gene therapy to manage head and neck cancers when surgery is not an option.

**Liver Cancer**

Liver cancer is the third leading cause of cancer-related death in the world, according to the World Health Organization. Driven by the need to address the impact of this disease, Mount Sinai has positioned itself at the forefront of liver cancer treatment and research in the US. Scientists at Mount Sinai are studying the molecular pathways underlying liver cancer pathology, as well as new treatments to stem its spread. Dr. Myron Schwartz, Chief of Mount Sinai’s Hepatobiliary Unit and co-founder of its liver transplant program, was recently awarded a five-year National Institutes of Health grant for clinical research and mentoring focused on hepatocellular carcinomas.

**Prostate Cancer**

Prostate cancer is the most commonly diagnosed malignancy in American men. Mount Sinai has been leading cutting-edge research exploring new avenues of diagnosis and treatment. The Barbara and Maurice Deane Prostate Health and Research Center offers patients convenient access to multidisciplinary care, including robotic prostatectomy, brachytherapy and external beam radiation, and expectant management. A variety of therapies for patients not responding to standard treatments, including new chemotherapeutic agents, novel combinations of standard chemotherapeutic agents, and gene-modified immunotherapy, are also available. In addition, the Deane Center implements community-based education, screening, and prevention programs. Dr. Simon Hall, Chair of the Department of Urology, conducts research on viral therapies that may yield new and innovative treatments. Dr. David Samadi, Chief of the Division of Robotics and Minimally Invasive Surgery in the Department of Urology, specializes in the use of the da Vinci® robotic surgical system, which gives surgeons greater visualization, dexterity, and precision. Dr. Richard Stock, Professor and Chair of Radiation Oncology, is involved in numerous breakthrough studies on brachytherapy, in which radioactive seeds are implanted directly into the tumor.

**Thoracic Cancers**

According to the American Cancer Society, lung cancer is the leading cause of cancer death among both men and women. Driven largely by smoking and environmental factors, the number of lung cancer patients at Mount Sinai has tripled in recent years. In addition to traditional surgical procedures, we offer minimally invasive treatments, including photodynamic therapy, laser therapy, radiofrequency ablation, and the Cyberknife robotic radiosurgery system. We also offer outpatient treatments for mesothelioma, a disease often caused by breathing asbestos, in which cancer cells are found in the sac lining of the chest or abdomen. Our lung cancer tissue bank will be used to research the genesis and progression of lung cancer.
We’ve made great progress in understanding how cancer develops, as well as how the critical genes and pathways are affected. Our questions, in other words, are more profound and precise, which leads to more groundbreaking answers. Because of its collaborative environment and commitment to translational medicine, Mount Sinai is an ideal place to ask these questions and make these discoveries.”

Stuart A. Aaronson, MD

The Tisch Cancer Institute will not only have a formidable impact on cancer care and research, but also a prominent presence on the Mount Sinai campus. Occupying four full floors of Mount Sinai’s new translational research facility, the Center for Science and Medicine (CSM) – two for basic research and two for clinical care and research – The Tisch Cancer Institute is indicative of Mount Sinai’s commitment to fighting cancer.

Nearly one-third of Mount Sinai’s strategic investments have been dedicated to cancer care and research. The Derald H. Ruttenberg Treatment Center will more than double in clinical capacity when it moves into the CSM. Ground for the approximately 500,000-square-foot CSM was broken in 2008, with construction scheduled for completion in 2012.

The Tisch Cancer Institute will extend and enhance Mount Sinai’s leadership in translational research, enabling us to more quickly and effectively migrate novel discoveries from the lab bench to the bedside, providing patients with access to the most current and promising treatments and techniques available. Our researchers will also initiate clinical trials of cancer-related treatments that are developed throughout the Medical Center.

Dr. Aaronson is the Jane B. and Jack R. Aron Professor of Neoplastic Diseases, and Chair of the Department of Oncological Sciences at Mount Sinai School of Medicine. He is an internationally-recognized physician-scientist who has made several pioneering discoveries into the molecular basis of human cancer. They include the identification of some of the first human cancer-causing genes, which led to the first approved drug directed against a cancer gene target.
We live in a moment of breathtaking potential. Major advances in diagnosis and treatment have enabled physicians to treat cancer with success rates that would have been unimaginable a generation ago. Today, patients may live for many years after diagnosis. Longer life, however, often brings additional health problems involving multiple organs or systems that require a wide range of sophisticated care. The changing face of cancer calls for a radical shift in the way we approach cancer treatment and research.

Achieving the ambitious goals of The Tisch Cancer Institute will require an enormous investment of resources. To that end, Mount Sinai plans to recruit more than 30 new medical oncologists, cancer biologists, stem cell researchers, and geneticists. In addition to investing in skilled professionals, we also must acquire, enhance, or leverage advanced technologies, state-of-the-art facilities, and high-impact community and medical education programs.

To do this, we need your generous support. More accurately, the many thousands of people in our service area affected by or at risk for cancer – including your own family members, friends, colleagues, and neighbors – need your support. Your philanthropic gift to The Tisch Cancer Institute will make an enormous difference in countless lives, today and tomorrow, here and elsewhere.
A Sampling of Strategic Funding Objectives.

**Intellectual Capital**
Personalized, skilled clinical care. Groundbreaking translational research. These can only be achieved by brilliant and accomplished faculty. Recruiting and retaining extraordinary talent is a key component in making The Tisch Cancer Institute successful. Our intellectual capital requirements include:

- Surgeons
- Solid Tumor Medical Oncologists
- Radiation Oncologists
- Clinical Investigators
- Translational Researchers
- Basic Scientists

**Capital**
Facilities aren’t curative in themselves, but the right facilities can be highly conducive to realizing more effective care and more ambitious research. State-of-the-art equipment and technologies and well-designed lab and treatment spaces can make a real difference. Our capital needs include:

- Center for Science and Medicine (clinical and research spaces)
- Radiation Oncology Treatment Area
- The Eva and Glenn Dubin Breast Care Center

**Programmatic**
A diagnosis of cancer presents patients with a host of new questions, concerns, and needs. Through education, treatment, and other services, we provide the information and specialized interventions that are necessary complements to the care we deliver. Our programmatic priorities include:

- Cancer Prevention
- Epidemiology
- Palliative Care
- Psychosocial Programs
- Patient Navigation

To learn more about The Tisch Cancer Institute’s specific giving opportunities, please contact:

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