The Sesquicentennial



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Special thanks to TIAA-CREF for underwriting this publication.

THE MOUNT SINAI HOSPITAL

1852-2002

The Sesquicentennial

he 1850s were a time of relative peace and prosperity in America. The agricultural and industrial revolutions were gradually transforming our minor nation into a major power. The railroads were spreading westward, opening new markets and widening horizons. Immigrants were filling the cities, fueling the economy with their hopes and dreams.

But progress came at a price. Cities were growing crowded and polluted, becoming incubators for infectious diseases. Violence and workplace injuries added to the misery of urban life; the average American could expect to live just 40 years.

In this atmosphere, delicately balanced between promise and peril, a group of philanthropists and civic leaders gathered to create a hospital for the fast-growing community of Jewish immigrants crowding the tenements of lower Manhattan. Thus was born the Jews' Hospital in New York, joining the first wave of hospitals that would shape American medicine for generations to come.

The history of the Jews' Hospital—soon renamed The Mount Sinai Hospital, a more accurate reflection of its mission to help all those in need—is much more than the story of a single institution. Reflected in the windows of this great hospital is the history of a nation as it struggled with wars and epidemics and social upheavals.

A sense of The Mount Sinai Hospital's extraordinary past can be found on the following pages, which feature 15 snapshots of the institution, one from each of the decades leading up to this year's sesquicentennial celebration. Some of the stories are well known, such as the contributions of the Hospital's unit that served overseas in World War II, while others have nearly been lost to history, such as the gripping tale in the 1960s to save a newborn suffering from complications related to Rh-null blood, among the rarest of conditions. Together, the 15 stories tell a collective tale of the courage and compassion of doctors, nurses, administrators, and service workers—the kind of people that turn buildings of brick and steel into refuges for the sick and injured. It is this common bond that links the Jews' Hospital of 1852 to The Mount Sinai Hospital of 2002. Some things never change.



Founding Father



Sampson Simson

t the age of 72, Sampson Simson could very well have retired to his Yonkers estate, far from the bustle of the growing metropolis to the south. Instead, this lifelong philanthropist would dedicate his remaining years to a special cause—the founding of a hospital for the Jewish poor in New York.

Not much is known about Sampson Simson. He was a descendant of Nathan Simson, a prosperous European merchant of Ashkenazic origins whose dealings stretched across the British Empire. The Simsons probably originated in Holland and Frankfurt. In all likelihood, the family name was Sampson, but was later anglicized to Simson.

At some point, the Simsons emigrated to the colonies and settled in Manhattan. When New York fell to the British, the family fled to Danbury, Connecticut, where Sampson was born in 1780. He graduated from Columbia College in 1800 and studied law under Aaron Burr. He was probably the first Jew admitted to the New York State Bar.

Mr. Simson, a lifelong bachelor, preferred country life. However, despite his advanced age and the long, bumpy carriage ride from his rural estate to Manhattan's Lower East Side, he persisted in leading the effort to build the Jews' Hospital in New York (as The Mount Sinai Hospital was initially called), the second Jewish hospital in the United States.

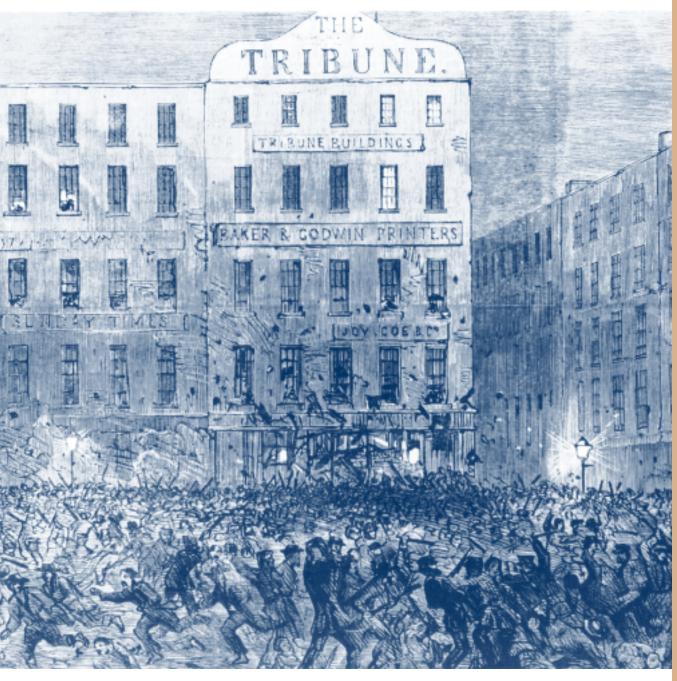
On January 15, 1852, Mr. Simpson and eight associates signed the documents incorporating the new hospital for "benevolent, charitable, and scientific purposes." Mr. Simpson, who was elected president, proceeded to donate his own land on 28th Street, between Seventh and Eighth Avenues, for the construction of this desperately needed facility.

As the opening of the hospital neared, Mr. Simpson resigned in February 1855, sending his fellow board members his "fervent wishes for prosperity of the institution and your individual happiness." A committee was appointed to beseech him to stay on, to no avail.

Three months later, the new four-story hospital was dedicated and opened to the public. Sampson Simson died two years later at the age of 77, gone but not forgotten.



The Unexpected



Turbulent times brought riots to New York City.

ess than six years after the opening of the Jews' Hospital, its beds would be filled with an unexpected patient population—soldiers from the Civil War.

As the rift widened between the North and South, New York became the base for Union Army supplies. In 1861, the city voted \$1 million for the war effort and dispatched the Seventh Regiment, 999-men strong, off to Washington.

Immediately afterward, the Board of Directors of the Jews' Hospital passed a resolution to "tender to the State authorities a ward in this Hospital for the accommodation of such soldiers who may be wounded in the service of the United States." Beds and corresponding supplies for 48 soldiers were purchased in anticipation of casualties. As donations came in, 21 additional beds were acquired. The Hospital set rules excluding soldiers with contagious diseases and permitting the acceptance of only ten typhoid fever cases at a time, apparently all that could be handled on a separate ward.

A number of the hospital staff participated in the war. For example, Dr. Israel Moses, a member of the Army from 1847 to 1855, was commissioned a Lieutenant Colonel in the 72nd New York Volunteers, serving four years. Joseph Seligman, a member of the Board of Directors in 1855, was often called to Washington to consult with President Lincoln on financial matters. Because of his increasing responsibilities in the nation's capital, he found it necessary to resign his Hospital post in 1862.

The following year, the Hospital was filled with victims of another social conflict. At the time, the North held the upper hand in the war, but a shortage of troops necessitated a new draft, aimed mainly at family men, since the pool of single men had already been drained. As before, anyone who could pay \$300 or hire a substitute could avoid the draft. It was this inequity, among other resentments, that fueled the infamous Draft Riots of 1863.

The riots ensued the day after publication of the draft lists. Angry protesters gathered in the Upper West Side tenement district and spread toward Midtown. Troops in Central Park opened fire, and the mob rampaged, seizing a gun factory on 20th Street, and sacking and burning the elegant mansions on Lexington Avenue. The blood lust grew, and innocent people, including many black people, were beaten and killed.

The Jews' Hospital was frequently at the geographic center of the fury. That day, and the bloody days to follow, the Hospital became the sanctuary of the sick and wounded. It is estimated that 1,200 men, women, and children were killed, and presumably thousands more were injured, during the riots.

A few years later, on April 17, 1866, the Jews' Hospital changed its name to The Mount Sinai Hospital, a more accurate reflection of its mission to accept patients without regard to race or religion.



7

1870-1879

Father of American Pediatrics



Dr. Abraham Jacobi

Children's ward at Mount Sinai's second site, on Lexington Avenue f any one man were indispensible to The Mount Sinai Hospital during the post-Civil War era, it was Abraham Jacobi, M.D.

Dr. Jacobi's life is a tale right out of Hollywood. As a medical student in his native Germany, he joined the revolutionary social and political movements of 1848, engaging in activities that landed him in prison for treason. The young man outwitted his captors and escaped to Hamburg. He sailed to England and then to America, eventually settling in New York City, where he set up a medical practice on Howard Street.

And that is only the first chapter of his storied life. Over the next few decades, Dr. Jacobi would rise to the pinnacle of American medicine. He established the nation's first pediatric clinic (effectively creating a new medical specialty), founded the American Journal of Obstetrics, and served as president of the nation's foremost medical organizations, including the New York Medical Society, the New York Academy of Medicine, and the American Medical Association.

The Mount Sinai Hospital was the setting of many of his accomplishments. In 1860, he was one of three attending physicians appointed to the newly reorganized medical staff of the Hospital, beginning a relationship with the institution that would last until his death in 1919. Dr. Jacobi was especially active at the Hospital in the 1870s, when he was instrumental in establishing the Medical Board (on

which he would eventually serve as president), a separate pediatrics service (the first in a general hospital in New York City), and a separate outpatient department.

At the turn of the century, he participated in the effort to build Mount Sinai's new hospital complex at its present site on the Upper East Side.

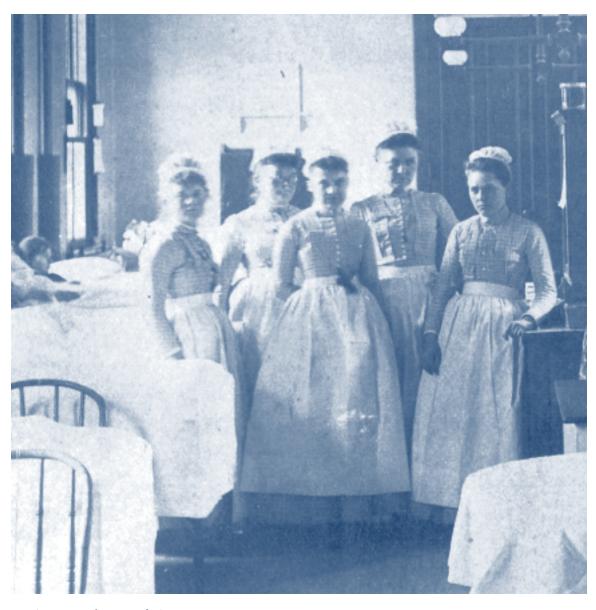
Anticipating the rise of academic medicine by several decades, Dr. Jacobi told potential benefactors that "a hospital is a school for doctors who learn and profit in the interest of mankind from collected and collective experience. It is a school for nurses... It is a school for the patients and their families... insofar as they are taught ... of preventive and curative measures. Finally, it is a school for the medical world abroad through the scientific contributions emanating from the institution..." The new Hospital, completed in 1904, was hailed as "a model of sanitary science" by The New York Times.

Dr. Jacobi's story would not be complete without mentioning his stances in favor of family planning and against child labor, as well as his advocacy of the poor. Even late in his career, when his services were in great demand, he would make house calls to the slums of the East Side, caring for the immigrants who had followed in his wake.

Another New York City hospital now bears Dr. Jacobi's name, but Mount Sinai surely bears his legacy.



The Missing Ingredient



Nursing was taught as a profession at Mount Sinai, starting in 1881.

An early graduate of the Mount Sinai Training School for Nurses rom day one, The Mount Sinai Hospital attracted the best and brightest doctors. The same superlatives could not be used, however, to describe the Hospital's early nurses. More maids than caregivers, the nurses of this time were largely untrained and unprofessional, ignorant of the principles of hygiene, the basics of anatomy, and the techniques of bandaging.

In 1878, in the face of medical opposition, a group of the Mount Sinai Ladies' Auxiliary began to agitate for a nursing school connected with the Hospital. Unfortunately, the Auxiliary's leader, Alma de Leon Hendricks, died soon after, and so did her plans.

But the Hospital could not ignore the need for trained nurses much longer. Two years later, a committee was formed to reconsider the plan. "It has been practically demonstrated in all the hospitals of Europe and some in this country that regularly trained, skilled nurses not only materially relieve pain and disease and are of vital assistance to the physician, but also greatly reduce the death rate therein by keeping the resident doctors fully posted on all that transpires during their absence and noting the progress of diseases..." the committee reported to the Board of Directors.

The Board soon resolved to create the Mount Sinai Training School for Nurses, to be modeled after the program pioneered by Bellevue Hospital. Led by Kate Rich, a Bellevue graduate, Mount Sinai's Training School opened in March 1881 with a staff of four graduate nurses and eight probationary

students. The yearly budget was \$6,190.

To gain acceptance to the school, each probationer had to present letters testifying to her good moral character and sound health. An examination in reading, penmanship, simple arithmetic, and English or German diction weeded out all but the best candidates.

The instructional part of the curriculum was short (six weeks), but comprehensive, including lectures on obstetrics and gynecology, bandaging and surgical dressings, eye and ear diseases, throat and nose diseases, surgical emergencies, medical emergencies, and anatomy and physiology. The curriculum also featured anatomical demonstrations on cadavers—quite unusual for nursing schools of the day.

Those who successfully completed a one-month probationary period were required to sign an agreement to remain on staff for two years of training, in return for a stipend of \$9 a month the first year and \$15 a month the second. It was a brilliant system, practiced by many institutions. For a mere pittance, the Hospital secured a full staff of nurses, who toiled from 8 a.m. to 8 p.m., six–and–a-half days a week, with alternate Saturdays or Sundays off.

In 1885, the School ran into financial difficulties and notified the Board that it would have to close. The Board agreed to cover its debts for a year and commenced a search for a more economical source of nurses. None was found, and the Board continued to support the School for another year, at which time public contributions were enough to make up the shortfall.

What better invvestment, one might ask, than ensuring the quality of nursing?

The Right Breed



Seeds of science: the first official clinical laboratory opened at Mount Sinai in 1893.

n the waning years of the nineteenth century, laboratory testing was still in its infancy. The few useful analyses for diagnosing or assessing a patient's condition could be performed in a facility the size of a closet—which, in fact, was the case at The Mount Sinai Hospital.

In 1891, at the urging of several members of the medical staff, the Hospital set aside a special room for laboratory tests, mainly urinanalysis. But that, too, soon proved inadequate. Two years later, a proper laboratory was established, under the leadership of Dr. Henry N. Heineman, an attending physician, and his assistant, Dr. Frederick S. Mandelbaum, a graduate of the house staff.

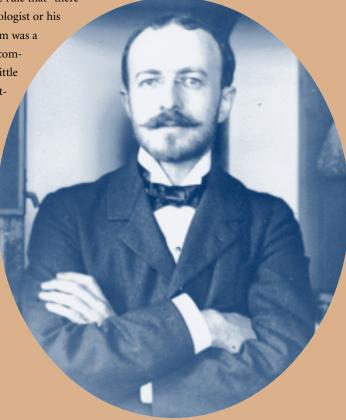
For six months, they were a staff without a home or much of a budget. Dr. Mandelbaum did all the Hospital's lab work in his office. Taking matters into his own hands, Dr. Heineman announced his intention to donate equipment for the new department and \$500 a year to pay for his assistant. Later that year, the Pathology Laboratory opened on the second floor of the north wing in a coatroom once used by nursing students.

Though it was an improvement, the little lab was far from perfect. Only two people could be accommodated at a time, prompting the rule that "there shall be no intrusion on the Pathologist or his Assistant." At one side of the room was a raised alcove, a common site for committee meetings, giving the staff little privacy or quiet. More problematic, the sterilizer leaked and could be used only if a broom handle, wrapped in cotton, were held against the hole. And when cultures were grown, someone had to sit up all night and make sure the equipment did not catch fire.

Nonetheless, the two pathologists, especially the young assistant, performed a vast amount of work. In the first two years, Dr. Mandelbaum performed all the Hospital's postmortem examinations. He did his own cutting of sections, staining of slides, and cleaning and sterilizing of test tubes. He even dusted the room and mopped the floor.

A good deal of research emerged from the lab. Upon Dr. Heineman's resignation, in 1895, Dr. Mandelbaum took over as director and began investigations into Gaucher's disease. Another physician, Dr. Charles A. Elsberg, conducted the first studies in America of the Widal reaction, a procedure for diagnosing typhoid fever. Dr. Emanuel Libman, a leading diagnostician and bacteriologist, began his career, including conducting valuable research on subacute bacterial endocarditis, a heart infection often known as Libman's disease.

"The Pathological Laboratory of The Mount Sinai Hospital had an extremely small beginning," Dr. Arpad Gerster commented years later. "Its first perch was in a place not much larger than a bird's cage—that is, in a bay window in the northwest corner of the old hospital. The birds inhabiting it were of the right breed."



A Social Conscience



In 1906, Mount Sinai extended its mission through its new Social Service Department.

ntil the turn of the century, hospitals gave little thought to what patients needed before they were hospitalized or after they were discharged. The focus was on delivering care in the wards and clinics. That began to change with the new century, part of a nationwide awakening to the concept of public health. Government, for example, took a more active role in the health of the citizenry, instituting such measures as the Pure Food and Drug Act. Hospitals, for their part, extended their reach beyond their walls and out into the community, branching out into social service. The country, it could be said, was developing a social conscience.

Mount Sinai was at the forefront of this movement. In 1906, at the urging of its superintendent, Dr. S. S. Goldwater, the Hospital formed a Social Service Department, the second in the nation. Dr. Goldwater, who is recognized as the first professional medical administrator in the United States, saw social service as part of a broad medical program, rather than an end in itself. The social worker, he wrote, "touches elbows with the apostles of preventive medicine."

Mount Sinai's first social worker was Jennie Greenthal, a graduate of the Mount Sinai Hospital Training School for Nurses. Ms. Greenthal established regular contacts with convalescent homes for the chronically ill, bought surgical appliances for needy patients, and visited patients in the wards and in their homes, where she discussed family problems and arranged emergency care for their children. She also concentrated on getting compensation for workmen injured on the job (there were no workman's compensation laws in those days). Ms. Greenthal returned to her nursing position after three months and was replaced by another nurse.

Evidently, the Hospital's Board of Directors was pleased with their work, as reflected in the 1908 annual report, which reads, "It is now recognized that the condition of a patient's family while he is in our wards, as well as his needs immediately after his discharge from the hospital, constitute so vital a part of his ability to recover, and to retain his health, that the work of this department has come to be recognized as a legitimate part of

the functions of the institution."

During its first two years, the department handled 800 patients, a remarkable number for a onewoman operation. In 1909, a second nurse was added, and the caseload soared to 1,471. That same year, the social workers began home visits, teaching new mothers the principles of hygiene and infant care.

New York City's tuberculosis control efforts. In 1907, the Hospital assigned a nurse to care for TB patients in its district, as well as a visiting nurse to instruct patients about how to care for themselves and avoid infecting others.

Mount Sinai also participated in

To this day, social work remains an integral part of The Mount Sinai Hospital.

Growing Pains



The hospital's Lexington Avenue site, first built in 1904, underwent major expansion beginning in 1913.

Dr. Richard Lewisohn's transfusion techniques paved the way for modern blood banks. edical science flowered in the new century. Progress and promise filled the halls of The Mount Sinai Hospital.

In 1900, for example, Mount Sinai acquired an xray machine. (The first picture revealed a fracture in the upper thigh of an obese patient—but only after a 10-minute exposure!) A decade later, Dr. Charles Elsberg developed the first portable apparatus for administering anesthesia by means of insufflation of air and ether, making thoracic operations possible for the first time. That same year, Dr. Edwin Beer described a revolutionary method of destroying certain kinds of bladder tumors using high-frequency electrical current, a procedure adopted all over the world. Dr. Richard Lewisohn later solved the last major hurdle to routine blood transfusion—the inability to store blood outside the body—when he discovered the exact amount of citrate necessary to temporarily prevent blood from coagulating.

There was only one problem with this flurry of innovation—the Hospital had little room to accommodate the resulting influx of patients or the spe-

cialized facilities needed to treat them.

Patient volume skyrocketed, fueled by New York City's swelling population, as well as the development of new treatments. In 1911, Mount Sinai recorded 8,121 inpatient visits, 3,811 accident cases, and 226,989 outpatient visits, roughly double the figures from 1905.



Meanwhile, the trend toward specialization precipitated the creation of five new departments:

Neurology, Orthopedics, Otology, Physiotherapy, and Radiotherapy. In addition, the Department of Surgery was splintered into four sections (brain and spinal cord, thorax, stomach and duodenum, and kidney and ureter), and a new cardiographic laboratory (for measuring different aspects of heart function) was added.

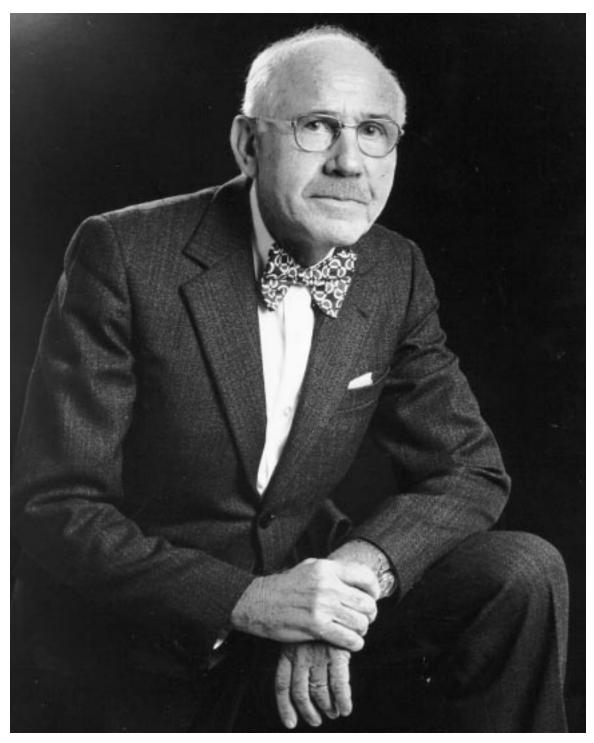
In response, the Hospital enlarged the outpatient dispensary and added two stories to the nursing school, among other improvements. But these were only patchwork solutions.

In 1913, Mount Sinai announced a major expansion plan, calling for a new laboratory building, a children's pavilion, a pediatric clinic, a larger pavilion to address the growing clinical demand among what were termed "white-collar" patients, an auditorium to support the burgeoning educational programs, a home for the director of the hospital, and a dormitory for 240 employees. The total projected cost was \$1.35 million, most of which was already on hand from individual donations. The remainder

was to be raised, which proved difficult after the outbreak of the war.

Remarkably, even this expansion plan did not keep pace with the Hospital's growth.

Master of Cardiology



Dr. Arthur Master

The Master two-step was the first cardiac stress test.

y the 1920s, stress tests had become a regular part of cardiology—for better and for worse. None of the tests, whether they involved stair climbing, hopping, or dumbbell swinging, paid much heed to critical variables, namely the patient's age, sex, and weight. Consequently, the results were inconsistent and sometimes misleading, if not useless.



cise test was adopted by clinicians around the world, greatly improving the detection of heart disease. Importantly, the test also reduced the number of false-positive diagnoses, a common problem with earlier tests, leading to unnecessary treatment and untold worry. Dr. Master's test survives today as the treadmill test, one of the most common tests in cardiology.

The Master two-step exer-

That would all change in the latter half of the decade, when a young cardiologist at The Mount Sinai Hospital, Dr. Arthur M. Master, injected a healthy dose of science into the chaotic practice of cardiac testing.

Less than two years after finishing medical school, Dr. Master had already published two important papers in cardiology, the first two of hundreds that would eventually establish his reputation as one of the giants in the field. In 1925, the cardiologist, then 30, turned his attention to stress testing. At the time, it was generally recognized that patients with coronary artery disease may have normal electrocardiograms at rest, but will often show abnormalities under stress. Clinicians, however, lacked a standardized way of measuring this phenomenon.

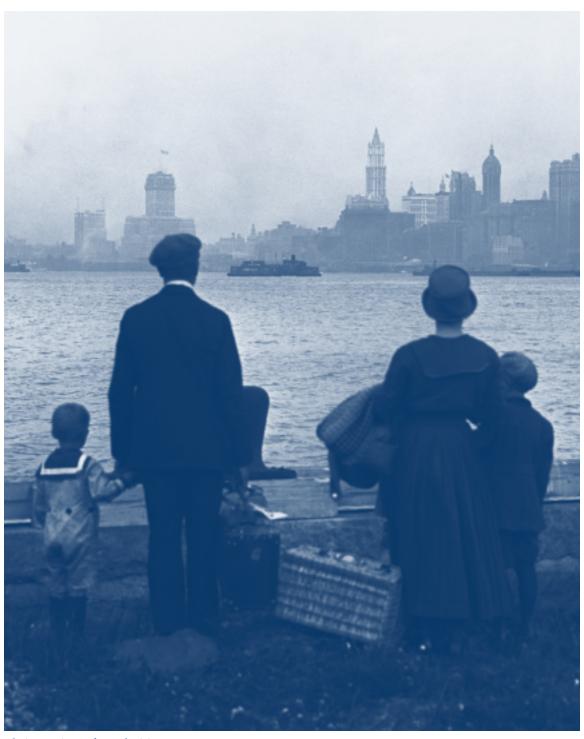
With his colleague Enid T. Oppenheimer, Dr. Master devised a stress test that called for patients to ascend and descend two nine-inch steps for a specified amount of time, accompanied by calculations that took into account the patient's age, sex, and weight. The test was easy to follow and completely standardizable.

During his half-century of service to The Mount Sinai Hospital, Dr. Master would make many other contributions to the field of cardiology. He recognized, for example, that patients often made a complete recovery from heart attack and thus argued that they should be urged to return to work and recreation as soon as possible. The idea was opposed by many, but, of course, it became a foundation of modern cardiac care.

Well ahead of his time, Dr. Master advocated the use of preventive therapies to reduce the toll of heart disease, such as lowering blood pressure, controlling diabetes, reducing cholesterol levels, and stopping smoking. Dr. Master also demonstrated that obesity had a deleterious effect on cardiac function and that weight reduction improved exercise tolerance. He challenged the common practices of overfeeding and overmedicating heart patients. In addition, he made major contributions in delineating normal levels of blood pressure for people in different age groups.

Dr. Master remained active in clinical practice until his death in 1973 at the age of 77.

Safe Harbor



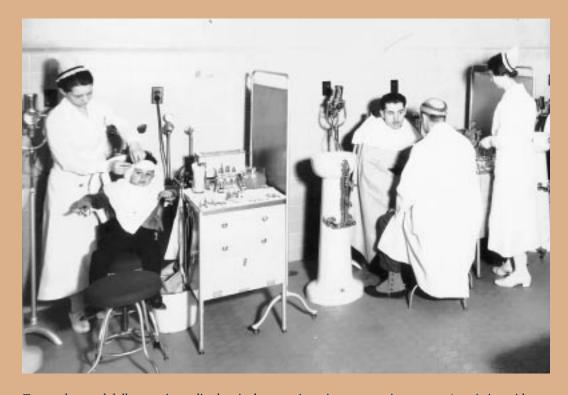
Fleeing Nazism, refugee physicians and scientists joined Mount Sinai.

n keeping with its roots as a hospital for the Jewish people, Mount Sinai opened its doors to refugees fleeing the horrors of Nazi Germany. Hundreds of émigrés—scientists, doctors, and nurses, as well as dishwashers, secretaries, and electricians—found a home at the Hospital in the years before and during the war.

The first step was taken in 1933, when the directors appointed a committee to study the feasibility of finding places in the Hospital for refugee physicians and researchers from Germany. Many were offered appointments, allowing a number of distinguished scientists, who might otherwise not have been able to obtain visas, to come to this country.

Department staff; ultimately, more than 200 were able to obtain appointments. Many others were allowed to visit as observers so they could become acquainted with American medicine and improve their grasp of the English language.

An additional 36 physicians served one-year externships in outpatient medicine between 1939 and 1941, under an arrangement with the National Committee for the Resettlement of Foreign Physicians, which was organized to help clinicians prepare for practice in the States, especially in rural areas. Of New York hospitals, Mount Sinai accepted the largest number of these physicians, who were often shattered by persecution, some by actual expe-



Twenty thousand dollars was immediately raised to enable the scientists to continue their research at Mount Sinai. The following year, an unused laboratory building on 101st Street was renovated to accommodate the exiled researchers. The Hospital also supplied funds to the scientists for materials and equipment and a stipend for living expenses. Furthermore, the labs were opened to other scientists from abroad who wished to learn American methods before taking medical licensure exams here.

The Hospital also made arrangements to allow émigré physicians to work on the Outpatient

rience in concentration camps. Association with American colleagues and renewal of professional respect proved of real therapeutic value.

A number of refugees also served on the inpatient medical staff, as well in the departments of physical therapy, radiography, electrocardiography, and anesthesia. Fourteen émigrés graduated from the nursing school.

Unfortunately, the tyrants of Europe would grow even more destructive in the years ahead, challenging The Mount Sinai Hospital as never before.

Tired and Triumphant



Serving the war effort in North Africa

A procedure—performed near Cassino, Italy in Mount Sinai's Third General Hospital of the Army of the United States ell before the country joined the war,
The Mount Sinai Hospital initiated
efforts to support America's future allies
overseas. The Hospital's first step was to devote the
resources of the recently organized blood bank,
whose deposits were destined for the Blood for
Britain program. An entire floor was set aside for the
bank, which was staffed by more than 125 volunteer
doctors, nurses, and technicians. A similar program
was later established for the American military.

That was only a small part of Mount Sinai's contribution to the war. After Pearl Harbor, the Hospital formed four Catastrophe Units in cooperation with the Office of Civilian Defense. The units were prepared to go out at a moment's notice to care for victims of enemy action or other disaster. tually grew to include 56 medical and dental officers and 116 nurses, who were supported by 500 enlisted men. On May 5, 1943, after months of training and preparation, the men and women boarded the H.M.S. Pasteur and set sail for Casablanca.

The unit settled in Mateur, Tunisia, a dusty war-torn strip of land, and proceeded to establish a 1,000-bed hospital. Twelve days after it opened, the hospital had 1,255 patients on hand, casualties from the Sicilian campaign, suffering from malaria, neuropsychiatric disorders, trench foot, or war wounds. By the end of the campaign, almost a year later, the unit had treated more than 5,000 soldiers.

Even for medical professionals accustomed to seeing pain and suffering, the experience must have been



In addition, Mount Sinai was the first hospital in New York City to open its wards for training Red Cross nurses' aides. Over the course of the war, several thousand aides were trained, greatly alleviating the domestic nursing shortage.

Several trustees, administrators, and physicians lent their services to the government, including Dr. George Baehr, President of the Medical Board, who was appointed Chief Medical Director of the Office of Civilian Defense.

The Hospital's single greatest contribution to the war effort was the Third General Hospital of the Army of the United States, continuing a tradition that started with Base Hospital No. 3, Mount Sinai's WWI unit. The Third General Hospital was activated in September 1942 at Camp Rucker, Alabama. It even-

devastating. Yet, as Mount Sinai historians Joseph Hirsh and Beka Doherty wrote, the unit's doctors and nurses were buoyed by "the tremendous capacity of the human organism to take insult and injury beyond all measures and nevertheless survive and recover."

In April 1944, the Third General Hospital boarded two ships for Italy, landing in San Leucio. This period was relatively uneventful, as the focus of the war had moved elsewhere. Five months later, the unit relocated to the Hôpital Psychiatrique de Montperrin at Aix-en-Provence, France, where it would remain until the end of the war. The unit arrived home on September 15, 1945, tired and triumphant.

The Battle of '59



On the picket lines

Housekeepers were among those empowered by the new union.

he Mount Sinai Hospital, like the rest of the country, was blessed with peace and prosperity during much of the 1950s—except for a 45-day period that would forever change the institution.

The troubles began in 1958, when a small union of pharmacists and drug clerks with a progressive political bent—Local 1199—set out to organize New York City's huge private, nonprofit (voluntary) hospital system. They had a ready audience. Hospital service workers citywide were growing increasingly disaffected with their well-meaning,

but paternalistic employers, and they were inclined to believe that a trade union could win them better pay and working conditions.

But hospital administrators would have no part of it. "A hospital is not an economic, industrial unit," Dr. Martin Steinberg, Director of Mount Sinai argued, setting the tone for the coming standoff. "It is a social unit... Human life should not be a pawn in jousting for economic gain or power."

Talk of strikes filled the air. On March 6, 1959, 800 Mount Sinai workers boycotted the cafeteria in a lunch-hour demonstration, demanding that the Hospital recognize the union. Later that day, the administration issued a letter to employees stating that only increased hospital income could get them higher wages, and that Mount

Sinai was working with the city, insurers, and other sources to get more money. Regarding the possibility of a strike, the letter asked, "Strike against whom—our patients, sick people, children needing immediate medical care?"

But Mount Sinai's rank and file rejected the administration's arguments and voted, along with employees at five other voluntary hospitals, to walk out. The strike began on May 8 and lasted 45 days.

On the workers' side were powerful trade unions such as the AFL-CIO and luminaries such as Congressman Adam Clayton Powell and former First Lady Eleanor Roosevelt. The six hospitals had the backing of the entire hospital industry, the major newspapers, and the business community.

The leaders of 1199 and their supporters decried the "shameful working conditions... [that] threaten the health of the infants and children of these workers... and [indirectly] breed juvenile delinquency, crime, and violence." Not to be outdone, the Greater New York Hospital Association claimed, "This is not a strike, but a revolution against law and order."

In truth, the strike caused little disruption. By and

large, the hospitals went about their business. A month into the strike, Mount Sinai declared, "The strike has failed. The patients kept coming, and we did not let them down."

Local 1199 started looking for a facesaving solution. The two parties soon reached an agreement, greatly favoring the hospitals. The strike ended on June 22.

By most standards, the strike was a failure. The union was unable to gain recognition, and the workers won only a formal grievance mechanism. But history would say otherwise. As 1199 leader Leon Davis noted, the union won "backdoor recognition," adding, "We'll be in the front door before long."

Indeed, four years later, the New York State Labor Relations Act gave the hospital employees the right of

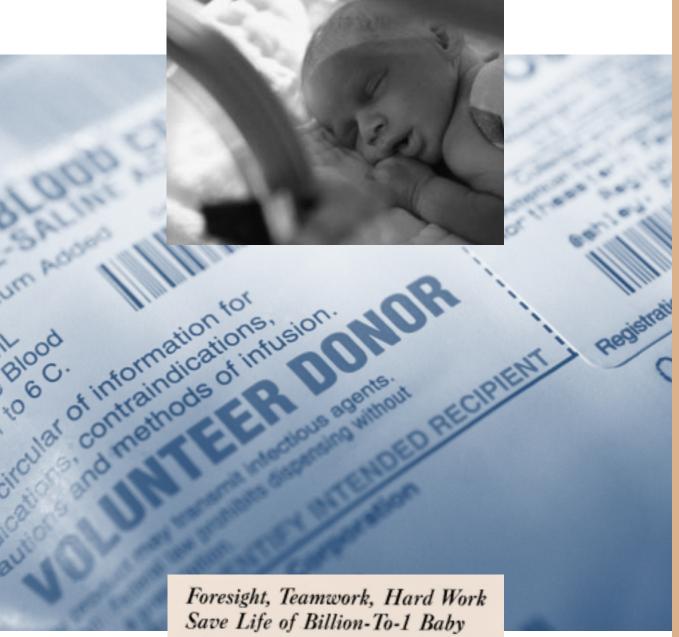
union affiliation. Mount Sinai employees quickly voted in favor of joining Local 1199. By the end of the decade, the union had recruited 30,000 members at dozens of local institutions, three-quarters of the metropolitan hospital workforce.

Nationwide, the unionization movement, sparked by the example of 1199, had become a powerful player in the hospital industry.

Was it all worth it? Four decades later, both sides would undoubtedly say "yes." The workers gained some control over their own destiny, while the hospital gained a more contented workforce—valuable advances for both.



One in a Billion



ing in Central Park across from the Hospital (see page one), Mount Sinai figured another, equally dramatic, life-saving achievement that also captured agriculton of all the nation's press media for a full week.

An infant, Derek Morgan Buth, was delivered by Caesarean section,

All thins, believed to the most unusual is medical history was that Derek's mother, Mrs. June Rose Rush, of Brooklyn, was one of only five people among the world's billions known to have blood of the type Rh Nall. The other four were a young boy in Tokyo, an Australian aborigine, an unidentified adult male in California, and another bousewife, Mrs.

ew people today remember Derek Morgan Bush, but in 1967, the story of this newborn's struggle for life captivated the nation for a week, demonstrating American medicine at its

The story actually starts several months earlier, when Derek's mom, June Rose Bush, of Brooklyn, was well along in her pregnancy. All was normal until a technician in the New York Bureau of

Laboratories discovered that the expectant mother had an extremely rare blood type, Rh null, meaning that she was lacking all Rh antigens. Only four other people in the whole world were known to share this blood type: a young boy in Tokyo, an Australian aborigine, an unidentified adult male in California, and a housewife in Alexandria, Virginia.

The prognosis for the unborn baby was poor. He had not inherited his mother's blood

type; her antibodies were destroying his blood cells and jeopardizing his survival. The experts were quickly consulted, including Dr. Richard Rosenthal, Director of the City Health Department's Rh-Testing Lab and of Mount Sinai's Blood Bank. With Ms. Bush's obstetrician, Dr. Rosenthal closely monitored the mother and her unborn child. When the mother's antibodies began to climb to dangerous levels, the doctors decided to deliver the baby by Caesarean section.

At the same time, a search was commenced for Rh null blood, to be exchanged for Derek's blood immediately after delivery. The transfusions were needed to save Derek's life; the mother's antibodies were still present in the infant and would destroy any red blood cells that were not Rh null. A call to the Rare Blood Donor Center of the American Association of Blood Banks turned up two pints of frozen Rh null blood in Boston, donated some weeks earlier by the Virginia housewife, Linda

> Mackall. Hurried phone calls located the woman, who agreed to fly immediately to Mount Sinai and stand by to donate fresh blood, if necessary. Meanwhile, Derek's father, Evan, was recalled from reserve military duty at Fort Sill, Oklahoma, and charged with the task of retrieving the precious pints of blood.

Derek was born six weeks premature, weighing 5 pounds, 6 ounces. He was immediately given a transfusion of freshly donated blood. Over the next few days, he received

several more transfusions, three of Rh null blood and two of freshly drawn normal blood. He was soon out of danger. One week after the delivery, mother and son returned home, well on the way to recovery.

There were undoubtedly stories at Mount Sinai during the 1960s that had a broader impact, but few were more heartwarming.

The Mount Sinai Concept



The first graduating class of Mount Sinai School of Medicine

he decade was but a few months old, and it was already time for celebrating a major milestone—the first graduation of Mount Sinai School of Medicine.

The story of this noteworthy event begins in the late 1950s. At the time, The Mount Sinai Hospital ranked 27th in the list of institutions receiving federal research money, quite high for a general hospital. But its ranking was destined to slip unless drastic changes were made. With biomedical research shifting to medical schools and research programs in the basic sciences, the Hospital and its century-old model of clinical research were quickly becoming anachronisms.

Nonetheless, a group of physicians and trustees at Mount Sinai went ahead with the tremendous task of defining the needs of the school, espousing a philosophy, planning a curriculum, and building the necessary support.

As for a philosophy, Dr. Popper articulated the early feelings of the planners in what later became known as the "Mount Sinai Concept," which involved a "balancing [of] biologic thinking in medicine with a concern for the whole patient." The planners also advocated a strong focus on community medicine. The belief grew that the best way to achieve this new kind of medical teaching was to create a new kind of medical institution, a universi-



It became clear that Mount Sinai would have to start a medical school to ensure that it would continue to attract research funding, recruit top-notch residents and staff physicians, and—most important—provide the best-possible patient care.

To this end, Dr. Hans Popper, Director of Pathology, and Dr. Alexander Gutman, Director of Medicine, went to Chicago to determine the Association of American Medical Colleges' perspective on starting a medical school at Mount Sinai. Although the group acknowledged the Hospital's reputation as a clinical leader, they hesitated over the idea of a hospital creating a school without the participation of a university, something that had not been done since the Flexner Report of 1910. There was also the issue of raising the needed funds.

ty of the health sciences, including a medical school supported by a strong teaching hospital and graduate schools of biologic sciences, physical sciences, and human studies.

Affiliation discussions with several prominent universities proved fruitless until 1967, when the Hospital reached an agreement with The City University of New York. Mount Sinai School of Medicine was launched the next year. Under the direction of Dr. George James, former Commissioner of Health for New York City, a faculty of 1,500 began training the next generation of physicians and scientists.

The first graduates—a group of 23 students who entered as third-year students—earned their medical degrees in 1970. The first class to complete all four years, 47 in all, received their diplomas two years later.

Building the Pyramids



The Guggenheim Pavilion, designed by world-renowned architect I.M. Pei.

fter founding the School of Medicine,
Mount Sinai's clinical and administrative
leaders deserved a lengthy vacation. But
there would be no respite. There was another collossal task at hand—rebuilding the Medical
Center's clinical facilities. Most of the wards and
clinics dated back to the first quarter of the century
and were entirely unsuited to the techniques and
technologies of modern medicine. There was no
time to waste.

In 1986, Mount Sinai embarked upon one of the largest reconstruction programs ever undertaken by an academic medical center. In the following years, \$500 million was raised to prepare the institution for health care in the 21st century.

The centerpiece of this grand renewal plan was the Guggenheim Pavilion, named for the Guggenheim family, in recognition of their philanthropy and dedication to the Hospital for over a century. It was the first hospital designed by the world-renowned architect I.M. Pei.

By its numbers alone, the Guggenheim is impressive: 11 stories, one million square feet of space, 625 beds, 22 surgical suites, dozens of ICU beds. But it is the overall design, a departure from traditional hospital architecture, that distinguishes this medical edifice. As visitors immediately notice, the building is light and airy, with two soaring, landscaped atriums topped by glass pyramids—actualizing Mr. Pei's design philosophy that proper ambiance is soothing and can actually be conducive to healing. Every patient room provides a view, either outdoors or onto one of the atriums.

Less obvious, but equally important, is the Pavilion's efficient physical plant for delivering medical care, including centrally located triangular nursing stations and patient-care functions positioned for direct access to support services. The building was also designed to accommodate both current and future technology, with ceiling space reserved to house cables for computer links and closed-circuit television.

The Guggenheim Pavilion was completed in 1992, beginning a new era in patient care.



The Guggenheim Pavillion as seen from Madison Avenue.

Decade of Discovery



From the bench to the bedside: basic research played a vastly expanded role in advancing patient care.

Il the effort that went into creating the School of Medicine and laying a foundation for biomedical research in the 1960s and 1970s paid off handsomely in the closing years of the century. In the 1990s, discoveries emerged from Mount Sinai in many fields, securing its place among the top ranks of academic medical centers.

Mount Sinai was particularly active in gene discovery, bringing the promise of gene therapy closer to reality. In 1991, for example, Dr. Francesco Ramierz, Ph.D., Professor of Biochemistry and Molecular Biology, was part of a team that identified the gene for Marfan syndrome. The discovery was a major step toward developing treatments for this potentially fatal hereditary connective tissue disorder, which affects about one in every 5,000 people. In 1996, Bruce Gelb, Ph.D., Professor of Pediatrics and Human Genetics, found the gene for pycnodysostosis, a hereditary form of dwarfism, which is believed to have affected Toulouse-Lautrec. The gene appears to play a pivotal role in the function of osteoclasts, cells that continuously dissolve bone and regenerate it.

Robert J. Desnick, M.D., Professor and Chairman of the newly formed Department of Human Genetics, brought the power of molecular genetics to bear on Fabry's disease, a rare condition in which substances called sphingolipids accumulate in the blood vessels, heart, kidneys, and other body parts, causing progressive organ failure and early death. Patients with Fabry's were known to lack a particular enzyme, suggesting that enzyme replacement therapy would be an effective treatment. But until recently, there was no way of producing enough of the enzyme for therapeutic purposes. In the 1990s, Dr. Desnick and his colleagues isolated the gene responsible for the enzyme and then, using genetic engineering, devised a way to produce large quantities of the enzyme. Clinical trials, just completed at Mount Sinai, confirmed that enzyme-replacement therapy is effective. "For 30 years, all I've been able to offer suffering patients is hope," said Dr. Desnick. "It's incredible to finally be able to offer relief."

The Division of Cardiology earned its share of accolades in the 1990s. Early in the decade, Mark B. Taubman, M.D., Professor of Medicine, and colleagues identified the proteins responsible for clot formation and inflammation in the blood vessel wall that contribute to reclosure of vessels following angioplasty or bypass surgery, a problem affecting hundreds of thousands of patients. Around the same

time, Jonathan L. Halperin, M.D., Professor of Medicine, directed the largest clinical trial of antithrombotic therapy for prevention of stroke in patients with nonvalvular atrial fibrillation, a common cardiac rhythm disturbance. And in 1997, Valentin Fuster, M.D., Professor of Cardiology and Director of the Cardiovascular Institute, led the largest clinical trial of heart attack survivors beyond hospital discharge, a study that delineated the best approach to preventing a second heart attack, stroke, or death using clot-preventing medications.

Meanwhile, Philip J. Landrigan, M.D., the Ethel H. Wise Professor and Chairman of Community and Preventive Medicine and Professor of Pediatrics, who has done as much as anyone to alert the nation to the dangers of toxins to our youngest citizens, launched a multi-year prospective epidemiological study of 100,000 American children. The study—similar in scope to the Framingham, Massachusetts, study of adults after World War II that helped document the risk factors of heart disease—will trace the long-term impact of children's health and development from early exposure to chemical toxins.

Through a variety of studies in the 1990s, Hugh Sampson, M.D., Professor of Pediatrics and Director of the Jaffe Food Allergy Institute, educated parents and pediatricians around the world to the dangers of food allergies. He and his colleagues recently began clinical trials of an immunotherapy for peanut allergies, which are potentially deadly and affect millions of Americans.

As the decade moved ahead, Mount Sinai scientists and clinicians contributed major advances across an astonishing spectrum of other diseases, as well—from shortening the wait for organ transplants, to countering the effects of Parkinson's disease, to shrinking cancerous tumors.

Spurred by the interaction of bench and bedside, the discoveries of the 1990s applied laboratory insights to patient problems far more swiftly and directly than ever before. For its prowess in translating science into solutions, Mount Sinai joined the very top ranks of medical research in the country.

Louis Seldner (19 Com





On June 5, 1855, The Jews' Hospital opens for patients, with the first patient, Louis Seldner, being successfully operated on for a fistula in ano.

In its first full year, The Hospital records operating expenses totaling

1866

To free itself of racial or religious distinction, The Jews' Hospital changes its name to The Mount Sinai Hospital.

1872

The Hospital moves to a larger building on 66th Street and Lexington Avenue, increasing its number of beds threefold.









The Medical Board and House Staff are organized, Dr Willard Parker becomes Chairman of the Board, and two women are appointed to professional positions, one to the House Staff and the other as Apothecary.

1872

1873 The Outdoor Dispensary

is formally established, with four divisions— Medical, Surgical, Gynecological, and Children's.



The Eye and Ear Service is created, headed by Dr. Emil Gruening, who in 1888 will perform one of America's earliest mastoid operations.



1886

Dr. Josephine Walter, the first American woman to serve a formal internship, is granted a diploma by the Hospital.

HISTORIC TIMELINE





1887

Dr. Bernard Sachs describes amaurotic family idiocy, now known as Tay-Sachs disease.

1896

Dr. Henry Koplik first describes a diagnostic sign of measles—today known as Koplik's spots. 1904

The Hospital dedicates its new buildings on 100th Street—with 10 pavilions and a capacity for 456 beds.

1908

Dr. Reuben Ottenberg is the first to perform blood transfusion with routine compatibility tests and to point out that blood groups are hereditary.

THORACIC SURGERY

THE SURGICAL TREATMENT OF THORACIC DISEASE

W. B. SAUNDERS COMPANY



1916

The Social Service Auxiliary is formed by a group of women volunteers.

1918

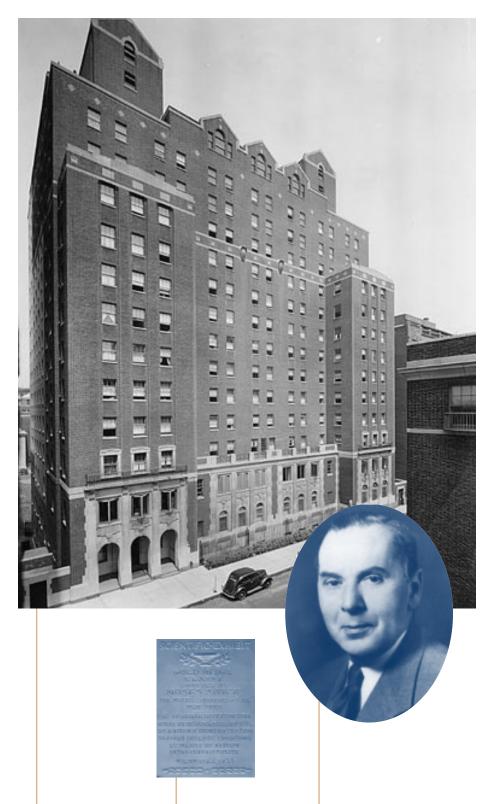
In Vauclair, France, Mount Sinai Base Hospital No. 3 begins operations, commanded by Dr. George Baehr.

1919

Dr. I.C. Rubin introduces the use of peruterine insufflation of the fallopian tubes for the diagnosis and treatment of sterility in women.

1925

Thoracic Surgery, the first American textbook on the subject, is published by a Mount Sinai surgeon, Dr. Howard Lilienthal.



1927

The new building for the School of Nursing is completed, accommodating 476 residents.

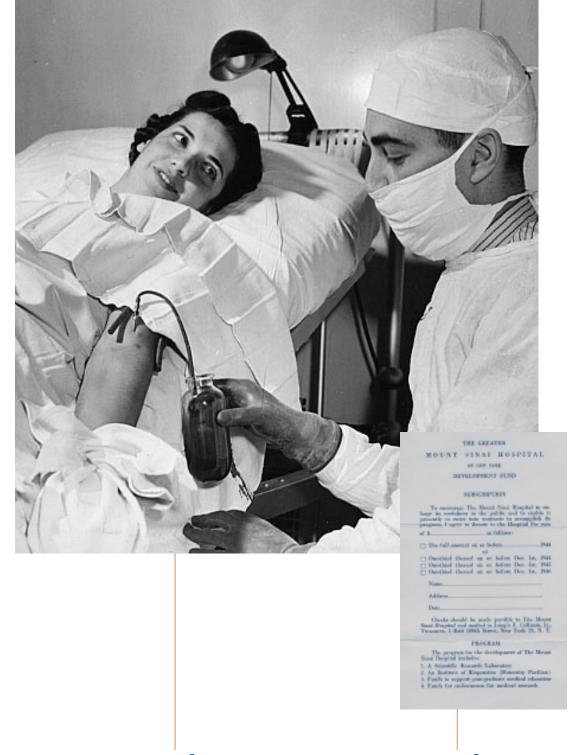
1928

Dr. Moses Swick develops the intravenous pyelogram, a method for introducing radio-opaque media into the blood stream for visualization of the urinary tract. 1928

Dr. Gregory Shwartzman identifies a necrotic reaction to filtrates containing endotoxin of gramnegative bacteria, now know as the Shwartzman phenomenon.

1932

Crohn's disease, a chronic inflammatory disease of the intestine, is identified by Drs. Burrill Crohn, Leon Ginzburg, and Gordon D. Oppenheimer.



1934

The Journal of The Mount Sinai Hospital is established, with its purpose to educate physicians.

1938

The nation's second blood bank is created under the direction of the Department of Hematology. 1942

Drs. Paul Klemperer, Abou D. Pollack, and George Baehr originate the concept and elucidate the pathologic nature of collagen disease. 1948

The Greater Mount Sinai Hospital Development building program is founded, and ground is broken for the Maternity Pavilion, the Central Laboratory Building, and the Berg Institute of Research.









The Hospital celebrates its 100th anniversary!

Three new buildings are dedicated—the Magdalene and Charles Klingenstein Maternity Pavilion, the Atran Laboratory Building, and the Berg Institute of Research.

1952

1955

The Jack Martin Respirator Center admits its first patients, who suffer from polio. 1959

Dr. Leonard Ornstein develops the polyacrylamide gel electrophoresis method of separating proteins. 1963

The New York State
Board of Regents grants a
charter to the Hospital
for the establishment of a
school of medicine.

1964

Drs. Irving Selikoff, Jacob Churg, and E. Cuyler Hammond publish their work on the effects of asbestos exposure in the formation of neoplasm, especially in the lungs. 1968

The Graduate School of Biological Sciences admits its first students. 1969

Dr. Edwin Kilbourne creates an influenza vaccine, the first genetically engineered vaccine.









1974

The Adolescent Health Center is established the first primary care program in New York specifically designed for the health needs of adolescents.

1976

Gustave L. Levy, Chairman Dr. Rosalyn Yalow of the Mount Sinai Board of Trustees, and a driving force behind the creation of the Mount Sinai School of Medicine, dies suddenly. He is succeeded by Alfred R. Stern, who defines the institution's long-term goals, and imparts a legacy of stability and strength.

1977

wins the Nobel Prize in Medicine for the development of radioimmunoassays of peptide hormones. 1978

The Community Board is established.







1982

The Department of Geriatrics and Adult Development is created the first such department in an American medical school.

1985

The Emergency Room is designated a 911 facility by the City of New York. 1985

Frederick A. Klingenstein, son of earlier Mount Sinai leader, Joseph Klingenstein, is appointed Chairman of the Mount Sinai Boards of Trustees. He leads the institution during an era of transformation that yields both the Guggenheim Pavilion and the East Building.

1986

Dr. Richard Berkowitz performs the first successful blood transfusion into the tiny vein of an unborn fetus.





Mount Sinai successfully performs the first liver transplant in New York State.

1989

The Center for Excellence The Morchand Center for The Department of in Youth Education is established.

1990

Clinical Competence is founded, including a patient simulation program.

1992

Human Genetics is established.



MOUNT SINAI NYU HEALTH

1992

The Division of Laparoscopic Surgery is created.

1996

The East Building opens.

1998

is formed.

1999 Mount Sinai NYU Health Mount Sinai School of

> Medicine's affiliation with New York University becomes official.

THE MOUNT SINAI HOSPITAL

2000, 2001, 2002...

Challenging the Present

"We must remember the past, define the future, and challenge the present—wherever and however we can. It will take the rest of our lives even to begin. But then, what else have we to do?"

—Jane O'Reilly, U.S. feminist and humorist (1980)

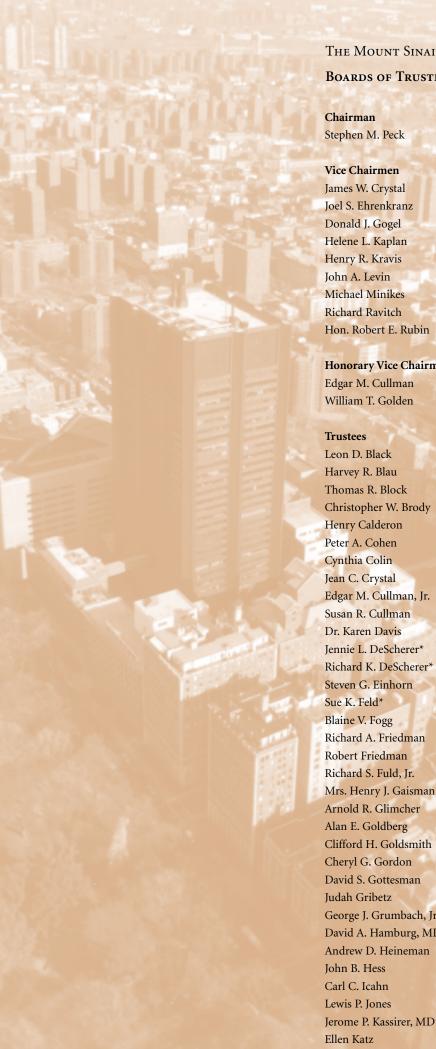
quick glance at the history of The Mount Sinai Hospital shows us how far we have come—and how far we have to go. Even with all the wonderful tools of modern medicine—the powerful antibiotics, the sophisticated imaging devices, the minimally invasive surgical techniques—millions of Americans are lost each year to heart disease, cancer, infectious disease, neurological disorders, and other ailments.

As Sampson Simson recognized a century and a half ago, we can do better.

And we are. In the basic sciences, for example, Mount Sinai molecular biologists are unraveling the genetic underpinnings of disease, paving the way for gene therapies, a whole new science of disease prevention, and novel classes of pharmaceuticals. In radiology, advances are allowing physicians to go beyond the still images of the past and capture changes and processes as they occur—making exploratory surgery necessary less often. In community medicine, experts are investigating the root causes of disease that affect different populations in often radically different ways. In surgery, physicians are advancing technology to enable them to perform specialized procedures, making the tiniest of incisions, even from the greatest of distances. Perhaps in another 150 years—perhaps significantly less—we will have developed therapies that allow most of us to live well into old age with sound minds and bodies.

Remembering the past...defining the future...challenging the present—these have been Mount Sinai's unofficial mottos for a century and a half—and counting.

An institution with an extraordinary history and with extraordinary care.



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