**2012** WE REACHED NEW HEIGHTS AND FACED DAMAGE ON NYU LANGONE MEDICAL CENTER EXAMPLES OF EXCELLENCE — FROM OUR DOCTORS.

**2012 ANNUAL REPORT** 





# Letter from the Dean & CEO and Chair of the Board

WE COULD EASILY REMEMBER 2012 AS A YEAR OF ADVERSITY. HURRICANE SANDY PRESENTED OUR MEDICAL CENTER WITH THE MOST SIGNIFICANT CHALLENGE IN OUR 171-YEAR HISTORY, YES, BUT IT WOULD BE A MISTAKE TO LET THE IMPACT OF THAT HISTORIC STORM—OR EVEN OUR REMARKABLE RESPONSE AND RECOVERY—OVERSHADOW OUR OTHER TREMENDOUS ACHIEVEMENTS.

Six years ago we embarked on a bold new course, aimed at establishing NYU Langone Medical Center's preeminence as a patient-centered, world-class, integrated academic medical center. In 2012, we continued to make dramatic strides toward this vision: The year was filled with shining examples of excellence across our core mission areas of patient care, research, and education, many of which are detailed in the following pages.

While our accomplishments are too numerous to recount in the space of this letter, a few deserve special mention. One is the growing recognition of the superior level of medical care and safety that we provide to our patients. We're especially thrilled that NYU Langone is one of just two institutions nationwide to be included in both the University HealthSystem Consortium's Top 10—where we ranked 8th in the nation among academic medical centers on their "2012 Quality & Accountability Scorecard" and on the U.S. News & World Report Honor Roll, where we came in at number 11 overall, with 13 nationally ranked specialties. NYU Langone is also first among the nation's academic medical centers for overall recommended care and surgical care on WhyNotTheBest.org.\*

Our contributions to medical and basic science continue to flourish. In 2012 our faculty produced close to 4,000 publications—many of them in the most prestigious journals—and secured NIH funding totaling \$165.7 million, up 9.5 percent over the previous year, especially impressive in light of recent government cutbacks. And in early 2013, our School of Medicine received its highest *U.S. News* ranking in a number of

years, based on our strength as a research institution: number 21 in the nation, an impressive jump from our rank of 26 last year.

Despite the disruptions and destruction caused by Sandy, we also achieved a major milestone with the full implementation of Epic, our electronic medical record system, across all of our inpatient clinical services. Patients, physicians, and staff now have a safer, faster, more secure way to access important data. In the years to come, Epic will continue to improve safety and efficiency for every patient who walks through our doors.

In the area of medical education, our first-of-its-kind, three-year doctor of medicine program is an innovative response to the real-world needs of future physicians and the patients they will serve, allowing doctors to embark on their careers sooner. And our new Department of Population Health answers the need to improve human health not only of individuals, but also of entire populations and communities.

The expansion of our outpatient services also moved steadily forward. The Center for Musculoskeletal Care opened its doors on East 38th Street and First Avenue in the spring of 2012. Two months later and one block to the west, we opened our 327,000-square-foot, state-of-the-art Ambulatory Care Center, which represents another major stride toward our long-term goal of providing enhanced access to care for our patients. From Brooklyn and Queens to Long Island, Westchester, and the Hudson Valley, we continue to expand our network of local clinics, caring for patients in the communities where they live and work.



Kenneth G. Langone

Robert D. Bissoma

Robert I. Grossman, MD
SAUL J. FARBER DEAN & CHIEF EXECUTIVE OFFICER

4 Hospitals 3 Aission 1

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Our ability to bounce back after Sandy was due in no small measure to our strong financial state. Our A3 rating from Moody's, issued in early 2013, underscores the impressive fact that our inpatient and outpatient volumes have largely rebounded since the storm, as well as the agency's confidence that our overall financial outlook is bright.

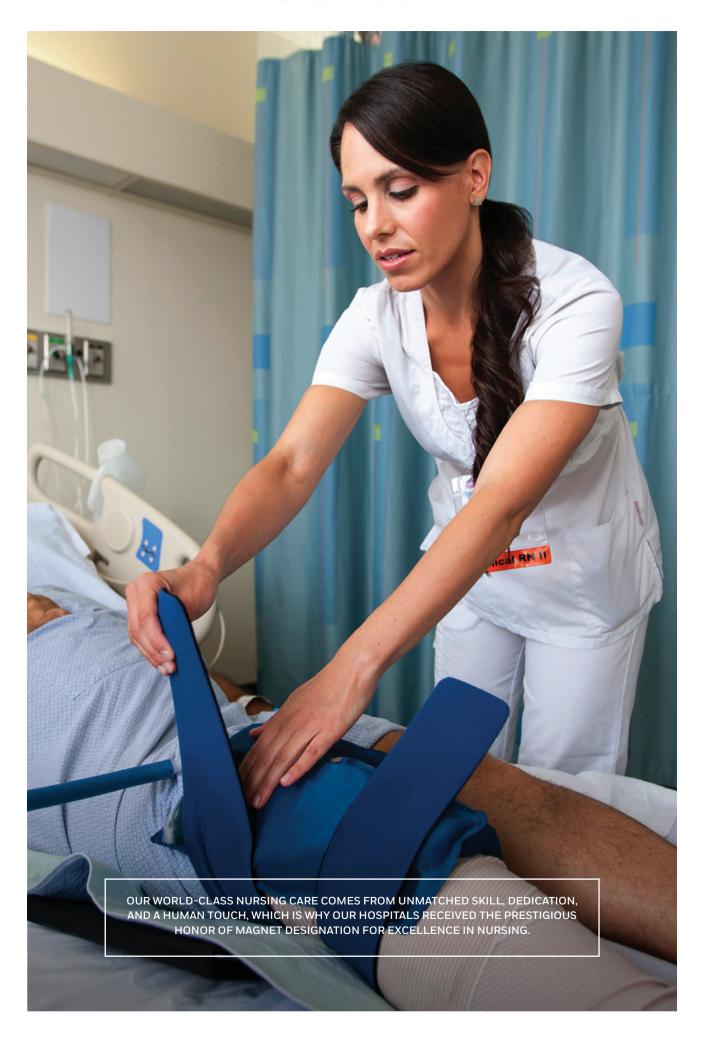
In yet another example of our unstoppable spirit, in several instances we have been able to use the destruction caused by Sandy to our advantage. We made the strategic choice to leave our Emergency Department, already in the midst of a planned expansion and upgrade, closed after the storm to speed up its full reopening, which will now take place sooner than originally planned. In its place, we created the Urgent Care Center, an innovative interim solution to providing care for patients with urgent medical needs. We have also been able to step up construction of our new Energy Building, a cornerstone of our campus transformation, which will revolutionize our energy infrastructure and drastically reduce the risk of outages in future storms.

It's been said before, but it bears repeating: The Medical Center's extraordinary resilience throughout Hurricane Sandy, and all of our accomplishments this past year, would not have been possible without our staff and faculty. Their diligence and courage, and the commitment to and compassion for our patients that they demonstrate every day—whether that day brings unprecedented disaster or the routine challenges of providing exemplary care—is the epitome of excellence.

Their efforts, along with the support of those who rallied to our aid and those friends who've been with us all along, have enabled our post-Sandy recovery to proceed at a pace that has exceeded the most optimistic predictions. In less than two months, we were able to resume most inpatient services on our main campus and return to doing what we do best—taking care of our surrounding community and beyond.

Our recovery is not complete, and more hard work remains, but the pride we should all feel at what we've achieved together in 2012 cannot be understated. With the unwavering energy and commitment of our greatest resource—faculty, staff, friends, and supporters—there's no limit to the new heights we will reach.

\*As of April 1, 2013





### A Reputation for Nursing Excellence Continues

Hospital for Joint Diseases Earns Magnet Designation

The 280 staff nurses at NYU Langone's Hospital for Joint Diseases (HJD) are valued by patients and physicians alike for their skill, dedication, and compassion. That admiration became official last year, when the American Nurses Credentialing Center (ANCC) awarded the hospital its coveted Magnet recognition for excellence in nursing and quality patient care. HJD is the third of NYU Langone's hospitals to receive the prestigious designation, following Tisch Hospital and Rusk Rehabilitation.

The award puts HJD in elite company: The ANCC awards Magnet designation to just 6.5 percent of hospitals and medical centers in the U.S. The four-year recognition is based on extensive quality and performance data submitted by HJD, as well as three days spent observing staff on every patient floor. The nurses' achievement is a testament to the outstanding bedside care they provide, the level of teamwork at HJD as a whole and, most important, positive patient outcomes.

Even among Magnet designees, HJD's nursing staff stands out.

Magnet appraisers—all senior nurses from Magnet institutions—cited HJD's nurses as "exemplary" both for their overall level of engagement and for the number of specialty certifications per nurse. On average, 27 percent of nurses at Magnet organizations have specialty certifications; at HJD, that number jumps to nearly 40 percent. In addition, 86 percent of HJD's nursing staff hold bachelor of science in nursing degrees—nearly twice the national average.

HJD's Magnet designation is proof positive of the world-class care that patients receive at NYU Langone. Magnet status is linked to lower mortality rates, shorter hospital stays, and increased patient satisfaction. It all adds up to the best possible care for patients.

 $3^{rd}$ 

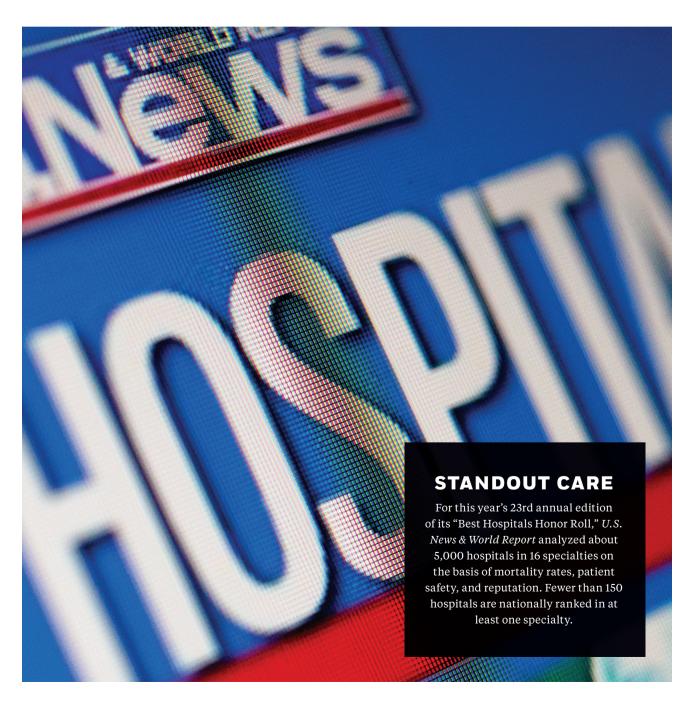
HJD is the third of NYU Langone's hospitals to earn Magnet designation 6.5%

of healthcare organizations in the U.S. qualify for Magnet designation 86%

of nurses at HJD have bachelor of science in nursing degrees

# World-Class Medical Care, by the Numbers

NYU Langone Earns High National Marks for Patient Safety and Overall Quality



In 2012, NYU Langone was ranked #11 in *U.S. News & World Report's* "Best Hospitals" issue, out of roughly 5,000 hospitals nationwide. This marked the first time since 2009 that the Medical Center has made the magazine's Honor Roll, which recognizes hospitals that achieve a ranking at or near the top in six or more specialties; just 17 institutions made the cut in 2012. Closer to home, we were also named the #2 hospital in the New York City metro area and in New York State as a whole by *U.S. News*.

The accolades didn't stop there: The Leapfrog Group—which works to enhance the performance of the nation's hospitals by spurring major "leaps" in the safety, quality, and affordability of healthcare in the United States—awarded NYU Langone its highest grade. The organization's "A" rating was one of only two top scores given to medical centers in Manhattan and reflects the Medical Center's overarching success in keeping patients safe from infections, injuries, and medical and medication errors. Overall, the group rated more than 2,600 U.S. hospitals on an A-to-F scale, based on 26 measures of publicly available hospital safety data. And government data from the Centers for Medicare and Medicaid Services, as reported on WhyNotTheBest.org, showed that we had the best performance among top academic medical centers for overall recommended care and surgical care, indicators that demonstrate top-notch quality and patient safety.

In addition, 116 of our physicians were featured on *New York* magazine's annual "Best Doctors" list, including experts in cardiothoracic surgery, dermatology, general surgery, neurosurgery, orthopaedic surgery, otolaryngology, radiation oncology, reconstructive plastic surgery, rehabilitation medicine, urology, and gastroenterology.

### NATIONAL RANKINGS IN U.S. NEWS

No. **11** 

OVERALL IN THE UNITED STATES

- 6 IN ORTHOPAEDICS
- 7 IN RHEUMATOLOGY
- 8 IN REHABILITATION
- 8 IN NEUROLOGY AND NEUROSURGERY
- 9 IN GERIATRICS
- 14 IN CARDIOLOGY AND HEART SURGERY

### QUALITY AND SAFETY



AWARDED FIVE STARS FOR "OVERALL
PERFORMANCE" AND RANKED ONE OF THE
TOP 10 ACADEMIC MEDICAL CENTERS IN THE
COUNTRY FOR PATIENT QUALITY AND SAFETY BY
THE UNIVERSITY HEALTHSYSTEM CONSORTIUM

99 FOR PATIENT SAFETY FROM THE LEAPFROG GROUP, A NATIONAL ORGANIZATION THAT PROMOTES SAFETY AND TRANSPARENCY IN HEALTHCARE. WE WERE ONE OF ONLY TWO MEDICAL CENTERS IN MANHATTAN TO RECEIVE THEIR HIGHEST GRADE.

# A Gleaming Structure to Support the Human Frame

NYU Langone's Center for Musculoskeletal Care Opens Its Doors When NYU Langone's 110,000-square-foot Center for Musculoskeletal Care (CMC) opened its doors in April 2012, it brought integrated medical care to a whole new level. The CMC serves as a single gateway for virtually all patients suffering from bone, joint, muscle, or connective tissue conditions, allowing them access to a full range of musculoskeletal specialties, including our innovative rehabilitation and wellness services, as well as cutting-edge research—all delivered with the compassionate care that is the Medical Center's hallmark.

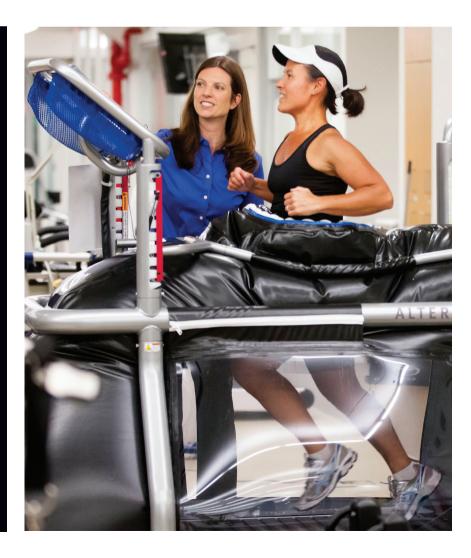
In addition to its impressive roster of specialists, the CMC represents a fundamentally different way of treating patients: By housing all of the physicians and therapists involved in a patient's care in one physical setting, the CMC enables individuals with musculoskeletal conditions to receive seamless, personalized diagnosis and treatment. And with orthopaedists, rheumatologists, physiatrists

### **JOINT EFFORT**

"Everything was designed around patient comfort and convenience. People with musculoskeletal problems often bring a good deal of pain and anxiety with them, so our goal was to create an environment that would cater to their emotional needs as well as their physical ones... In terms of its size, expertise, advanced technology, and ability to treat so many different musculoskeletal conditions under one roof, there's simply no other medical center that can match what we offer."

#### DAVID DIBNER

SENIOR VICE PRESIDENT FOR HOSPITAL FOR JOINT DISEASES, MUSCULOSKELETAL, AND RUSK REHABILITATION



(physicians who specialize in physical medicine and rehabilitation), sports medicine doctors, radiologists, physical therapists, and nurses all accessible under one roof, patients have the convenience of all their care providers in a single location.

Spread over three floors of 333 East 38th Street at First Avenue in Manhattan, the CMC features state-of-the-art equipment for imaging, rehabilitation exercises, and fitness and sports training that are unique to the New York metro area. Doctors can see a 3-D image of a patient's entire skeletal structure in a standing position, thanks to an ultra low-dose X-ray machine in use at only a handful of medical centers nationwide. The center's gym, which is staffed by Rusk Rehabilitation's world-class team of therapists, includes an antigravity treadmill that employs differential air pressure (the same technology used by NASA to train astronauts) to

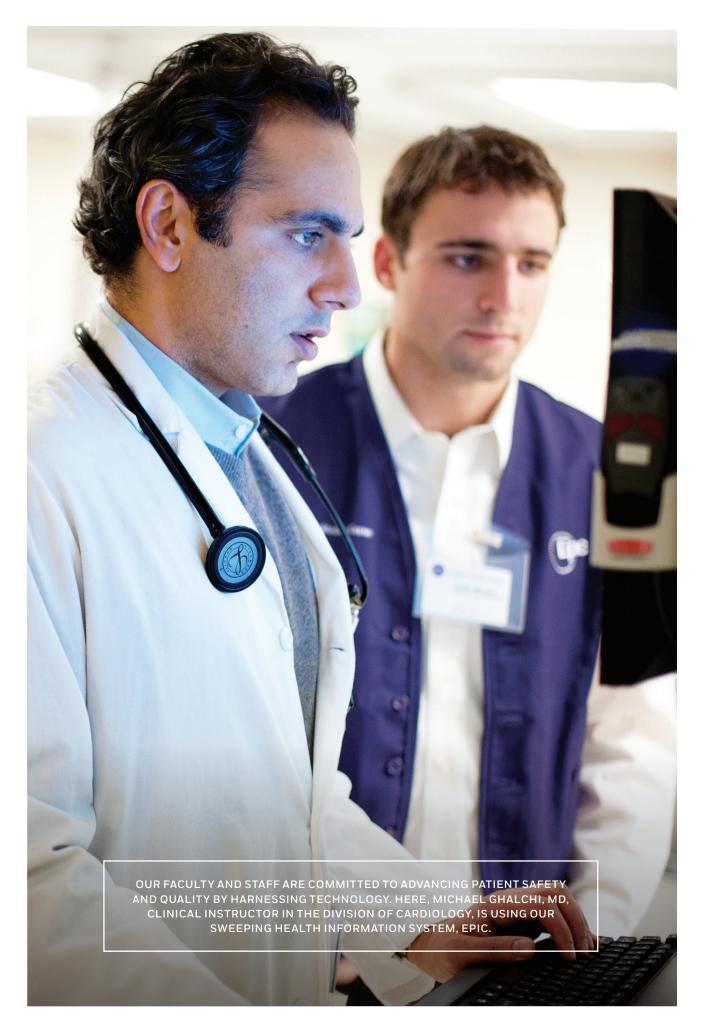
"unweight" patients recovering from surgery or injuries, allowing them to walk or run with no strain on healing joints.

Most important of all, the Center's combination of technology and medical expertise is proving to be a hit with patients: In its first year, the number of visits to the CMC reached nearly 150,000— an impressive start for a remarkable new facility.

149.7k

PATIENT VISITS IN THE FIRST YEAR





# Patient Data Goes Digital

Completing Our Information Superhighway

After five years of meticulous planning, NYU Langone successfully integrated, across all inpatient units, a sweeping, state-of-the-art health information system that revolutionizes the way care is delivered at the Medical Center.

The new system, called Epic, is also used by hundreds of physicians in their practices, and it will continue to be rolled out to our new and existing ambulatory sites.

Now, patient data collected in different locations is stored in a seamless database that keeps clinical information uniform and accurate, reducing duplicate testing. And inpatient information is logged digitally into Epic in real time, giving clinicians the most upto-date data at their fingertips, which enhances our overall ability to provide excellent care. Epic's database is also a boon for medical insights, as it allows information to be analyzed in ways never before possible.

Convenience is another benefit, as the system makes it easier for physicians to communicate with their patients through the secure NYULangoneHealth patient portal, where patients also access test results and request prescription refills from their computers. And thousands of patients check in at their physicians' offices and at the hospitals with a cutting-edge biometric palm scanning device, resulting in increased security.

Epic connects the Medical Center's hospitals, physician offices, and patients in ways never before possible—and the result is improved quality of care.

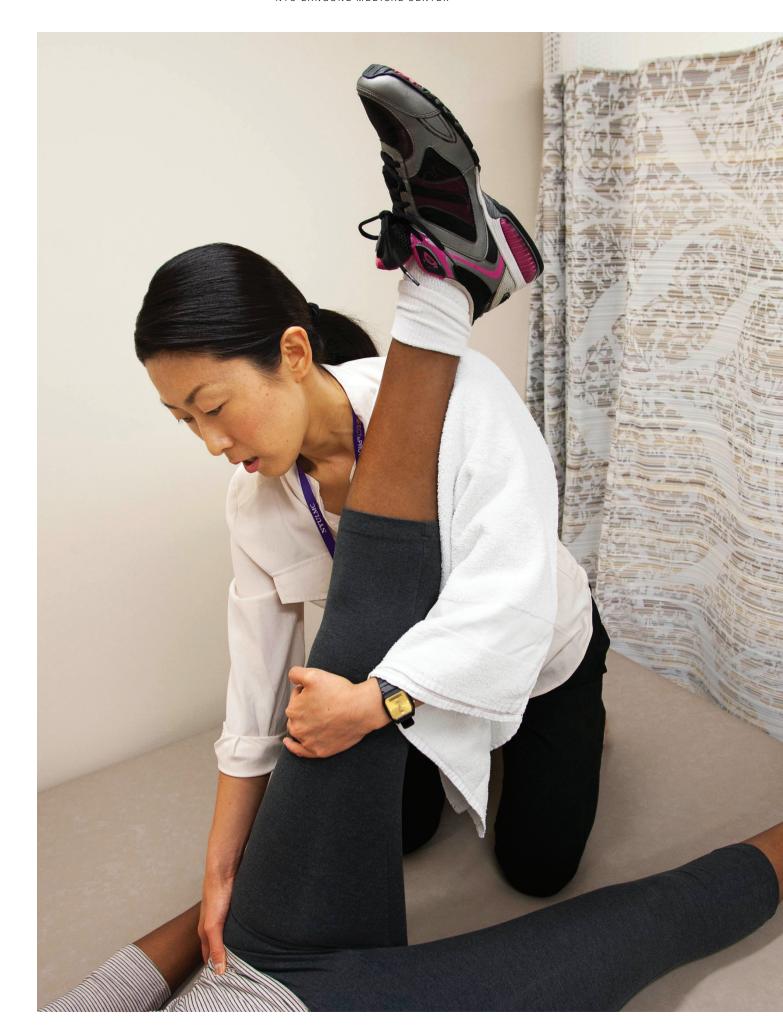
AMBULATORY SITES USING EPIC (AS OF JUNE 2013)

6,000+

FACULTY AND STAFF RECEIVED TRAINING FOR THE INPATIENT CLINICAL GO-LIVE

11,700+

TOTAL NUMBER OF EPIC USERS AT NYU LANGONE MEDICAL CENTER





# NYU Langone Expands Its Reach

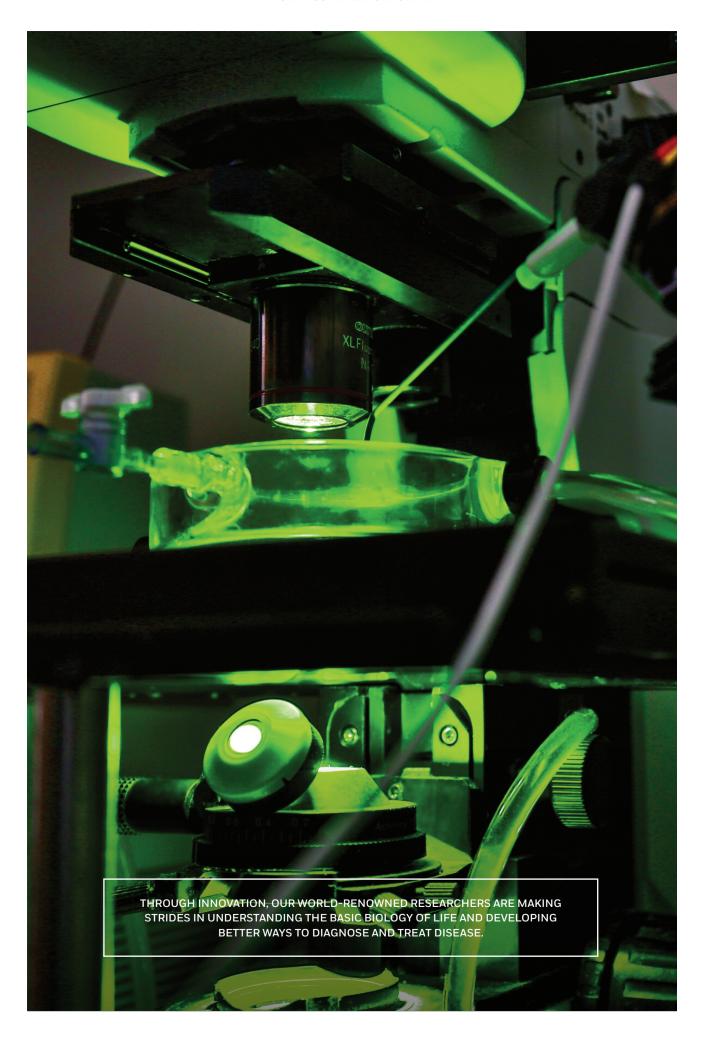
Bringing World-Class Clinical Care to a Neighborhood Near You

At NYU Langone, we are committed to providing seamless, high-quality care outside the hospital setting, in locations close to our main campus and in surrounding communities. We are steadily extending our network of clinical providers in Manhattan and New York City's other boroughs and in adjacent counties. Thanks to this expansion, the NYU Langone standard of care is accessible closer to where our patients live and work.

As our physician practices continue to expand into communities in Manhattan, Brooklyn, Queens, and Long Island, as well as Westchester, Putnam, and Dutchess counties, patients receive the expert local care they've come to rely on, with the advantage of access to NYU Langone's full breadth of medical and surgical resources.

In addition to physician offices, the Medical Center is opening a new wave of ambulatory care centers, designed to offer multiple specialties within a single facility. May 2012 saw the launch of our new Ambulatory Care Center (ACC), located at 240 East 38th Street in Manhattan. The ACC offers same-day and weekend appointments in rehabilitation, dermatology, endoscopy, nephrology, neurology, oncology, and more.

Our Center for Musculoskeletal Care, the first freestanding facility in the country devoted to the full spectrum of bone and joint care, opened its doors in March 2012. Located one block east of the ACC, it occupies three floors in the same building as our ground-floor Outpatient Surgery Center, which opened in 2009 and focuses on minimally invasive orthopaedic procedures. In June 2012 we inaugurated the Center for Women's Imaging on Lexington Avenue at 33rd Street. The new facility offers mammography, breast ultrasound, and bone density screenings, with extended weekend and evening hours, same-day appointments, and test results while you wait.





# Advancing Science Through Discovery

NYU Langone Ranks Among the Top 25 U.S. Medical Schools in Research Funding

Securing funding for projects is an essential aspect of any successful research program. In this area, the tireless pursuit by our elite team of basic science and clinical researchers of new treatments, diagnostic tools, and preventive measures is paying off. Three years ago we set the ambitious goal of joining the top 25 U.S. medical schools in terms of NIH research funding by the year 2015. We reached that goal in 2012, leaping from number 27 to 24, with NIH grants totaling \$165.7 million. Particularly impressive in light of ever-tightening federal research budgets, research funding from all sources also rose, to \$260.4 million.

Research initiatives that received a big boost from grant funding in 2012 exemplify the breadth of scientific inquiry under way at NYU Langone. The list includes a landmark study led by Gbenga Ogedegbe, MD, MPH, professor, Department of Population Health. This study is supported by a \$12 million, five-year grant from the NIH and tackles the growing epidemic of cardiovascular disease in Ghana and sub-Saharan Africa.

Another newly funded research project is a \$6.8 million five-year grant to principal investigators Bernardo Rudy, MD, PhD; Gordon Fishell, PhD; and Wen-Biao Gan, PhD, all from the Department of Physiology and Neuroscience, who seek to understand the normal and pathological role of the brain's interneurons, which regulate and sculpt the connections in the cerebral cortex and have been found to malfunction in autism, anxiety, schizophrenia, epilepsy, and other disorders.

90+

NYU Langone researchers submitted almost 100 more grant proposals in 2012 vs. 2011 9.5%

Increase in NIH funding over fiscal year 2011 8.5%

Increase in total research funding in 2012 vs. 2011 (excluding ARRA)

# Bringing Knowledge to the World

Published Biomedical Research Points to a Brighter Future

In 2012 NYU Langone's research community published close to 4,000 journal articles, books, and book chapters and increased the number of published peer-reviewed papers by 8 percent over 2011. In fact, since 2008, the faculty has increased publication in the most elite journals, such as *Nature, Science, Cell,* and the *New England Journal of Medicine*, by half. This rise in visibility and influence is a true testament to the tremendous vitality of our investigators' efforts across the spectrum of basic and clinical research.

Collectively, these publications provide a sterling example of our interdisciplinary approach to research. At NYU Langone, it's our deep belief that the true secret to successful translational research is teamwork. Our special brand of collaboration unites scientists and clinicians across a multitude of disciplines to pursue a common goal of saving lives and improving health worldwide. Remarkably, more than 75 percent of the School of Medicine's peer-reviewed publications over the past eight years have resulted from joint efforts that extended beyond a single research group.

This year our published research efforts included articles in some of the world's

preeminent scientific journals. The year's
highlights include:

Martin Blaser, MD, the Muriel G. and George W. Singer Professor of Translational Medicine, and his lab's insights into the link between gut bacteria, antibiotics, and obesity, which appeared in *Nature*.

Harvey Pass, MD, the Stephen E. Banner
Professor of Thoracic Oncology and professor
of cardiothoracic surgery and surgery, and his
lab found a marker in the blood for detecting
mesothelioma; their work was published in
the New England Journal of Medicine.

Adrian Erlebacher, MD, PhD, associate professor of pathology, and his lab solved the longstanding mystery of compatibility between the fetus and the maternal immune system—a finding that was published in *Science*.

Wen-Biao Gan, PhD, professor of physiology and neuroscience, delved into the physical changes to neurons when memories change. Creating a fear memory reduces a neuron's spines in specific places, while extinguishing the fear memory causes spines to grow back, partially erasing traces of the fearful memory. This work was published in *Nature*.



## Recognizing World-Class Talent

NYU Langone Researchers Garner Top Honors

For a medical researcher, there's no greater affirmation of scientific achievement than peer endorsement. This year, many NYU Langone faculty members—including our most distinguished and recently recruited scientists—were recognized by prestigious organizations for their contributions to biomedical research.

Jan Vilcek, MD, PhD, professor of microbiology, was presented with the National Medal of Technology and Innovation, the highest honor bestowed upon scientists, engineers, and inventors by the United States government. The award was given in recognition of Dr. Vilcek's pioneering work on interferons and therapeutic monoclonal antibodies—investigations that led to the development of the drug infliximab, or Remicade®, now widely used to treat Crohn's disease, rheumatoid arthritis, ankylosing spondylitis, ulcerative colitis, psoriasis and psoriatic arthritis, and other chronic inflammatory disorders.

Also honored was investigator **Dan R. Littman, MD, PhD**, the Helen L. and Martin S. Kimmel Professor of
Molecular Immunology, and professor of pathology
and microbiology, and a faculty member in the
Molecular Pathogenesis program at the Skirball
Institute of Biomolecular Medicine, who became
the ninth member of our faculty elected to the
Institute of Medicine. Dr. Littman was selected
for his seminal contributions to numerous fields,
including our understanding of the molecular basis
of immune recognition, HIV pathogenesis, and
T-cell differentiation and selection; and the role of
commensal bacteria (symbiotic bacteria that are

neither harmful nor helpful to their host) in immune system development and regulation.

Kathryn Moore, PhD, associate professor of medicine and cell biology, was the second woman to receive the Jeffrey M. Hoeg Award for Basic Science and Clinical Research from the American Heart Association, for her influential work in the field of inflammatory mechanisms of atherosclerosis. The award recognizes an established investigator in the prime of his or her career who has made outstanding contributions to furthering our understanding of atherosclerosis and its prevention.

Another internationally renowned researcher, **Richard W. Tsien, DPhil**, the Druckenmiller Professor
of Neuroscience, chair of the Department of Physiology
and Neuroscience, and director of the Neuroscience
Institute, was awarded the 2012 Julius Axelrod Prize at
Neuroscience 2012, the annual meeting of the Society
for Neuroscience. The award recognized Dr. Tsien's
exceptional achievements both as a scientist, where
he is a world leader in the investigation of calcium
channels and neurotransmission, and as a mentor.

Danny Reinberg, PhD, professor of biochemistry and molecular pharmacology, joined the distinguished ranks of the American Academy of Arts and Sciences as part of its 2012 class of Fellows. In an outstanding example of the collaborative research being conducted at NYU Langone, Dr. Reinberg, a Howard Hughes Medical Institute Investigator, was also awarded that organization's Collaborative Innovation Award for his team's efforts to unravel the molecular secrets of the ant genome.

Early-career investigators also drew richly deserved praise. **Robert Froemke, PhD**, an investigator in The Helen L. and Martin S. Kimmel Center for Biology and Medicine at the Skirball Institute of Biomolecular Medicine, and assistant professor in the Departments of Otolaryngology and Physiology and Neuroscience, was named a Pew Scholar in the Biomedical Sciences and awarded a fellowship from the Alfred P. Sloan Foundation, two prestigious accolades recognizing innovative early-career scientists, for his studies of neuroplasticity.

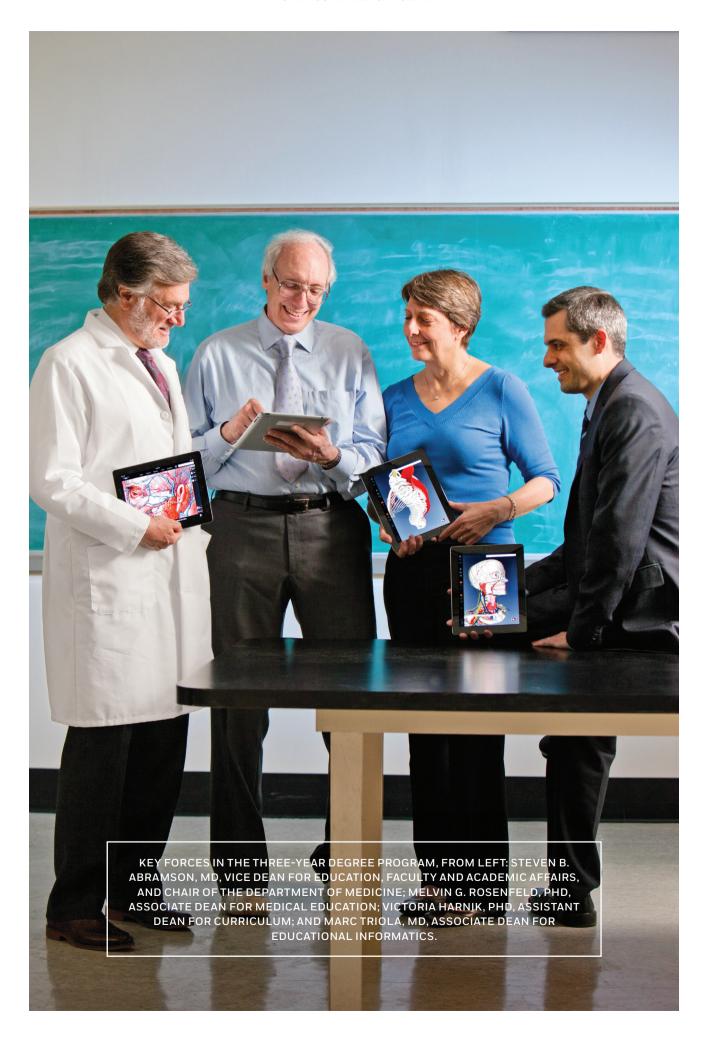
**Agnel Sfeir, DPhil**, assistant professor of cell biology, was recognized with a Damon Runyon–Rachleff



Nobel Laureates National Academy of Sciences Members Institute of Medicine Members

Innovation Award from the Damon Runyon Cancer Research Foundation for her work identifying novel strategies to thwart tumor progression. The three-year grant is designed to support early-career scientists conducting "high-risk, high-reward" research. The work must represent an exceptionally creative idea that has the potential to significantly impact approaches to preventing, diagnosing, or treating cancer.

And **Niels Ringstad, PhD**, assistant professor in the Department of Cell Biology and another member of The Helen L. and Martin S. Kimmel Center for Biology and Medicine at the Skirball Institute of Biomolecular Medicine, received the Presidential Early Career Award for Scientists and Engineers for his groundbreaking research on neuropeptides.



EDUCATION

For 171 years, NYU Langone has trained physicians and scientists who continue to shape the course of medical history.

# A New Vision for Medical Education

NYU School of Medicine to Pioneer a Three-Year MD Degree Program

NYU School of Medicine has long relied on its groundbreaking curriculum to attract the best and brightest students. Now, an innovative degree program puts us in an academic league of our own: NYU Langone is the first nationally ranked academic medical center in the U.S. to offer a three-year Doctor of Medicine (MD) degree. This program, which was approved in 2012 by the New York State Education Department, will allow selected students to complete their medical education on an accelerated schedule and then pursue careers in either primary care or the medical specialty of their choice.

The new student-centered program transforms the traditional model of medical education by reducing the length of time needed to attain the traditional MD degree, thereby allowing exceptional medical students to begin their careers earlier in a variety of fields, with less student debt. Moreover, all three-year degree candidates will be offered acceptance into an NYU Langone Medical Center residency program of their choice at the time of admission, providing a continuum of training between their undergraduate medical education and their graduate residency training.

Basic science education is not reduced in the accelerated program, but rather is integrated throughout the curriculum. By carefully eliminating redundancies, we've been able to abridge the traditional four-year MD process while retaining the high quality of the medical education we offer. We fully expect this landmark program, which was offered for the first time to students applying for medical school admission in 2013, to further enhance NYU Langone's ability to draw exceptional aspiring physicians, while at the same responding creatively and proactively to the changing healthcare landscape.

5

Dual-degree programs offered as part of Curriculum for the 21st Century 100

Medical schools using WISE-MD, our Web Initiative for Surgical Education

100%

of three-year degree candidates accepted into our residency programs

# Building Healthier Communities

Our New Department of Population Health Merges Medicine and Public Health Research The complexity of the real world demands that medicine address not only the health of individuals on a case-by-case basis, but also the health and well-being of entire populations and communities. In 2012 NYU School of Medicine responded to this challenge by launching the Department of Population Health. Chaired by Marc Gourevitch, MD, MPH, the Dr. Adolph and Margaret Berger Professor of Medicine, the department uses an interdisciplinary approach to research and implement disease prevention and treatment across diverse populations, both here in New York City and around the globe. No matter which population it is studying—a particular ethnic group, neighborhood, or geographic area, or a hospital or healthcare system-the goal is the same: to make the greatest possible difference in health and quality of life for the greatest number of people.

### REACHING OUT

"We're essentially transferring the extensive research we're doing from bedside to community, and that means drilling down into areas like behaviors, health disparities, effectiveness of medications, and access to healthcare."

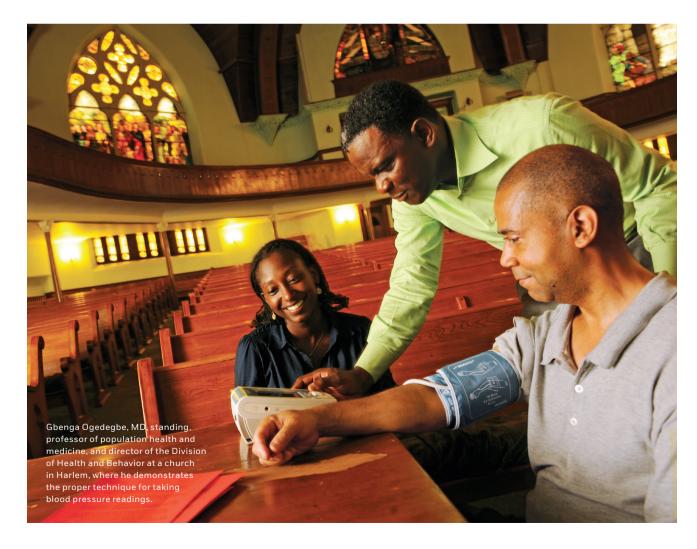
### STEVEN B. ABRAMSON, MD,

SENIOR VICE PRESIDENT AND
VICE DEAN FOR EDUCATION,
FACULTY AND ACADEMIC
AFFAIRS, AND CHAIR OF THE
DEPARTMENT OF MEDICINE

Describing the mission of the Department of Population Health



Drawing together researchers from across the Medical Center, the department provides a unique intellectual environment that incorporates a group of diverse but interconnected disciplines, including healthcare delivery, environmental medicine, biostatistics, epidemiology, health policy, and economics, as well as decision science and behavioral research. The aim of this multidisciplinary endeavor is to address a broad range of factors that affect health, then develop innovative strategies and interventions that will bring about health benefits on a wider scale. Recent examples of department-related publications include a large-scale tracking study of PSA test outcomes in older men, a study of cigarette smoking habits among Asian Americans, and an investigation linking phthalates, a common chemical ingredient of plastic products, with elevated blood pressure in children and teens.



# Expanding Our Clinical and Scientific Expertise

NYU Langone Welcomes an Outstanding Group of New Faculty Members In 2012 we were thrilled to welcome an outstanding class of talented physicians, researchers, and educators to the Medical Center. These latest additions to the NYU Langone team, led by the world-renowned group profiled below, are advancing science in exciting and unexpected ways, laying the groundwork for better health as they reinforce our steadfast commitment to excellence.

### Steven L. Galetta, MD, and Laura Balcer, MD, MSCE

In November, Steven L. Galetta, MD, joined NYU Langone as the Philip K. Moskowitz, MD Professor and Chair of the Department of Neurology, along with his longtime colleague and collaborator Laura Balcer, MD, MSCE, who joined our faculty as a professor of neurology and was appointed vice chair of the department.

A nationally recognized leader in neurology and medical education and one of medicine's foremost clinical neurologists, Dr. Galetta brings a depth and breadth of expertise in both neurology and neuro-ophthalmology. He joined NYU Langone from the University of Pennsylvania, where he was the Ruth



Wagner Van Meter and J. Ray Van Meter Professor of Neurology, and also served as vice chair of the department and director of the Division of Neuro-Ophthalmology.

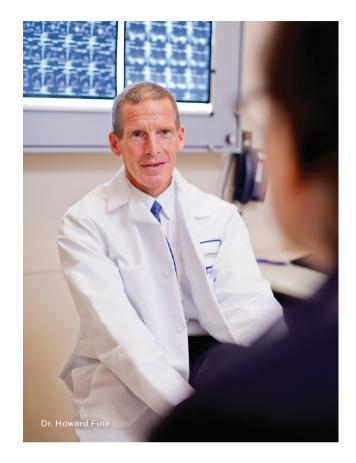
Dr. Balcer also comes to NYU Langone from the University of Pennsylvania, where she served as professor and director of their Neurology Department's MS Division. An established clinical investigator, she was one of the first epidemiologists to work in the field of neuro-ophthalmology, a subspecialty that explores the relationship between visual problems and the nervous system. Her team's work focuses on developing visual outcomes measures for multiple sclerosis.

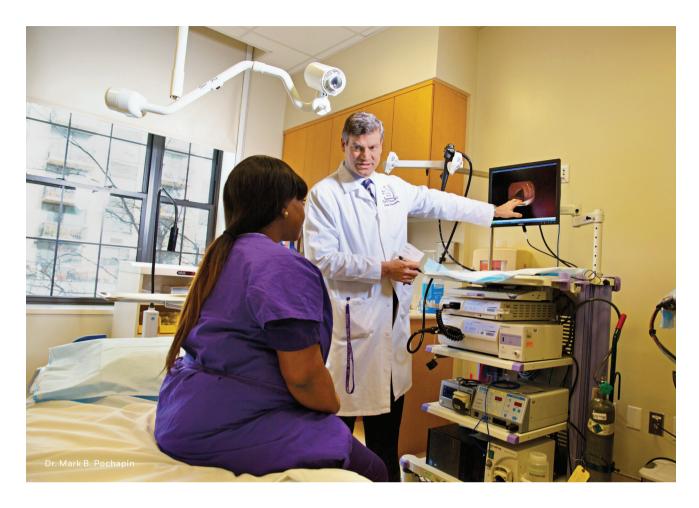
Together, Dr. Galetta and Dr. Balcer are pioneering faster, more accurate methods for diagnosing concussions, an effort that is reshaping our understanding of sudden brain trauma. Under their leadership, NYU Langone's Department of Neurology—already ranked among the best in the country for Neurology and Neurosurgery in *U.S. News & World Report*'s annual rankings—will reach even greater heights in its mission of providing exceptional clinical care, conducting translational research, and training the next generation of neurologists.

### Howard A. Fine, MD

In August, Howard A. Fine, MD, was appointed to our faculty and named chief of the Division of Hematology and Medical Oncology, director of the Brain Tumor Center, and deputy director of the NYU Cancer Institute.

One of today's leading neuro-oncologists, Dr. Fine brings a wealth of expertise to the NYU Cancer Institute, where he specializes in researching and treating brain tumors in adults and children. He joined NYU Langone from the National Cancer Institute in Bethesda, Maryland, where he was chief of the Neuro-Oncology Branch and held a joint appointment with the National Institute of Neurological Disorders and Stroke as an adjunct investigator. Dr. Fine's wide range of responsibilities at NYU Langone include directing clinical programs in solid tumor oncology, developmental therapeutics, malignant hematology, and experimental hematology. His high standards





of excellence and his substantial contributions to research deepen our already strong reputation for world-class medical care.

### Mark B. Pochapin, MD

Mark B. Pochapin, MD, is the Sholtz/Leeds
Professor of Gastroenterology and director of the
Division of Gastroenterology in the Department of
Medicine. Highly respected for his dedication to
the advancement of excellence and compassion in
patient care, Dr. Pochapin arrived at NYU Langone
in March from New York-Presbyterian Hospital and
Weill Cornell Medical College.

Board-certified in both internal medicine and gastroenterology, Dr. Pochapin's clinical focus is on gastrointestinal endoscopic procedures and on the prevention, early detection, and treatment of gastrointestinal malignancies such as colorectal, pancreatic, and stomach cancer. In the laboratory, his research projects include efforts to prevent colorectal polyps; the early identification and staging of pancreatic cancer; and the use of probiotics.

Dr. Pochapin is also leading the expansion of NYU Langone's faculty group practice in gastroenterology and will be developing programs in research and education in gastroenterology.

### Arthur Caplan, PhD

In July, Arthur Caplan, PhD, a nationally recognized bioethicist, was appointed the Drs. William F. and Virginia Connolly Mitty Professor of Bioethics and was also named director of the Division of Medical Ethics in NYU Langone's new Department of Population Health.

In his new position, Dr. Caplan's responsibilities include bolstering our existing applied ethics and bioethics program and ensuring that a strong bioethical framework is incorporated into global health initiatives at NYU Langone and New York University. Under his guidance, the Division of Medical Ethics is taking a lead role in current efforts to address the philosophical and practical dilemmas associated with advances in medicine and biotechnology. With his renowned expertise in medical ethics, Dr. Caplan will not only enhance our

curriculum and programs, but will also serve as an invaluable resource and teacher for our clinicians and researchers.

Prior to his NYU Langone appointment, Dr. Caplan was the director of the University of Pennsylvania's Center for Bioethics, which he built into one of the premier medical-ethics programs in the world. He also chaired U. Penn's Department of Medical Ethics from 2002 to 2009. Prior to joining the University of Pennsylvania, he taught at the University of Minnesota, the University of Pittsburgh, and Columbia University. In addition, he was associate director of the Hastings Center from 1984 to 1987.

#### Caroline S. Blaum, MD

Caroline S. Blaum, MD, a nationally recognized leader in the field of geriatric medicine, was named the Diane and Arthur Belfer Professor of Geriatric Medicine and director of the new Division of Geriatrics in the Department of Medicine in June.

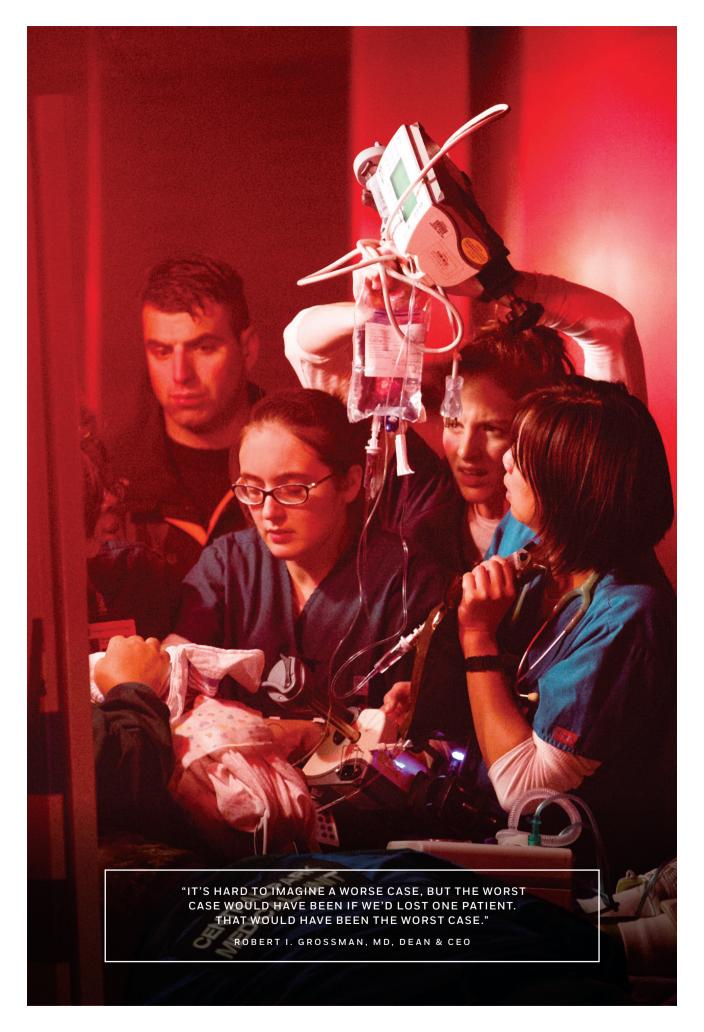
Dr. Blaum brings to the new division a distinguished history of advancing the growing field of geriatrics. In addition to maintaining an active geriatrics practice, she is very involved in developing national policy related to delivery system redesign and improving the quality of care for older adults and patients with multiple chronic conditions, and Dr. Blaum has also built a robust research program in epidemiology, translational, and interventional research. Her research interests include models of care (establishing an outline for current and future care), managing complex patients, frailty, and diabetes in older adults.

Dr. Blaum joined NYU Langone from the University of Michigan Medical School, where she was a professor of internal medicine, geriatric, and palliative medicine, a research professor in UM's Institute of Gerontology, and a research scientist at the Ann Arbor VA Geriatric Research, Education and Clinical Center. She also served as the medical school's assistant dean for clinical affairs and associate director of the University of Michigan's faculty group practice, and directed the UM Health System's Population Health Program.

The successful recruitment of talented physicians and scientists continues to bolster our already long list of outstanding faculty and is helping NYU Langone Medical Center reach new heights.







2012 ANNUAL REPORT

### **HURRICANE SANDY**

After the worst crisis of NYU Langone's 171-year history, faculty and staff worked around the clock to bring the institution back stronger than ever.

### A Historic Storm Meets Historic Resilience

Hurricane Sandy Casts a Spotlight on the Storm-Proof Spirit of NYU Langone Medical Center

As the storm surge propelled by Sandy's winds overtopped the banks of the East River on the evening of October 29, more than 15 million gallons of water poured into the basements and sub-basements of NYU Langone's main campus in the space of 30 minutes. The extensive damage forced the closing of Tisch Hospital, the Schwartz Health Care Center (HCC), Rusk Rehabilitation, and three research buildings—the Skirball Institute of Biomolecular Medicine, the Joan and Joel Smilow Research Center, and the Medical Sciences Building. The storm also shuttered Bellevue Hospital Center and the Manhattan VA Medical Center, both home to many of NYU Langone's researchers and clinicians and our primary teaching affiliates. The unprecedented disaster disrupted operations at the heart of our three core missions:

In the days before the storm, the Medical Center implemented a wide range of measures to mitigate its impact. Staff worked around-the-clock to discharge all medically stable patients and secure the physical plant, but Sandy struck with unexpected force, lashing New York City with the worst hurricane conditions in the past two centuries. A storm surge of 14 ½ feet quickly engulfed NYU Langone's campus. When water reached the buildings, and with the emergency backup power system at risk, executive leadership ordered the evacuation of all patients.

Over the next 13 hours, in a remarkable display of teamwork and grace under pressure, 322 patients were safely evacuated. NYU Langone personnel secured many patients onto "med sleds" and maneuvered them through the twisting stairwells of Tisch Hospital and HCC. Thanks to this expertly choreographed evacuation, executed with finesse and compassion, all patients were safely transferred to other institutions or discharged home.

322

Patients safely transferred to other institutions or discharged home 15m
Gallons of water

removed from the main campus

13

Hours needed to safely evacuate all patients





"The story here is the magnificence of the effort of all our people and what they did."

KENNETH G. LANGONE, CHAIRMAN OF THE BOARD OF TRUSTEES







In the days following the storm, the Hospital for Joint Diseases, faculty group practices, and ambulatory care sites continued to provide world-class care while we began to plan the reopening of the main campus. Openings were phased in gradually as facilities were ready to be safely brought back, beginning on December 17, when a number of procedural and surgical services went online in HCC. Then on December 27—less than two months after Hurricane Sandy struck—inpatient and surgical services resumed at both Tisch Hospital and HCC. By January 14, nearly all of the inpatient services that had been available on the main campus before the storm were up and running again—a tribute to the tremendous, around-the-clock efforts of our dedicated faculty and staff.

Our research leadership is continuing to work closely with the National Institutes of Health (NIH) to ensure that NYU Langone's groundbreaking biomedical research is able to proceed. Francis S. Collins, MD, PhD, director of the NIH, visited our campus along with Sally J. Rockey, PhD, NIH deputy director for extramural research, and they pledged to alter submission deadlines for grant applications, allow researchers to negotiate new objectives for their grants, and extend training periods for trainees whose research projects were seriously affected.

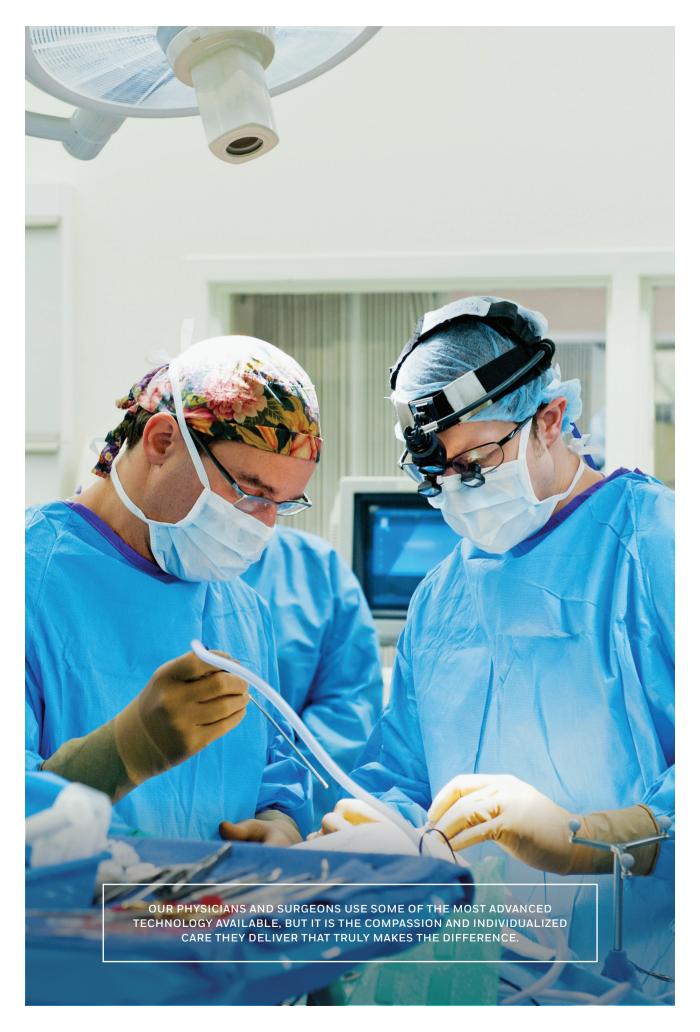
We hope our region will never again experience a catastrophe like Hurricane Sandy. If it does, however, NYU Langone will be more prepared than ever before. Our infrastructure repairs, including a number of new flood-mitigation initiatives, will make our Medical Center better able to withstand a storm of Sandy's magnitude. In addition to the construction of a new Energy Building, we are also implementing major upgrades to our information technology infrastructure. As it stands, no data managed by the Medical Center—including patient and research data—was lost or compromised. Planned improvements and new construction projects have been accelerated, including the installation of new telephone and

Top: Menchu de Luna Sanchez, neonatal intensive care nurse, on First Lady Michelle Obama's left during the State of the Union. Middle: Francis Collins, MD, PhD, director of the National Institutes of Health (center) with Dafna Bar-Sagi, PhD, senior vice president and vice dean for science (left), in the lab of Sergei Koralov, PhD, assistant professor of pathology (right). Bottom: Ken Langone with Dean Grossman (left) and Senator Charles Schumer (right).

fire-alarm systems and the renovation and expansion of the Emergency Department.

For 171 years, our institution has provided the highest level of patient care, advanced healthcare through discovery and innovation, and taught the next generation of physician leaders. The tremendous teamwork and tireless dedication of the NYU Langone community before, during, and after Hurricane Sandy has shown the world what we've known all along—that NYU Langone, like the city that surrounds it, is built to endure.





2012 ANNUAL REPORT

### **OUR STORY**

Committed to making world-class contributions to human health through an academic culture founded on excellence in patient care, education, and research.

## Our Mission: To Serve, to Teach, to Discover

NYU Langone Medical Center is one of the nation's premier centers of excellence in healthcare, biomedical research, and medical education.

Located in Manhattan, NYU Langone consists of four hospitals—
Tisch Hospital, a 705-bed acute-care tertiary facility; Rusk Rehabilitation, the first rehabilitation hospital in the world, with extensive inpatient and outpatient rehabilitation programs; the 190-bed Hospital for Joint Diseases, one of only five hospitals in the world dedicated to orthopaedics and rheumatology; and the Hassenfeld Pediatric Center, which encompasses the full array of children's health services—plus NYU School of Medicine, one of the nation's preeminent medical schools.

In addition, NYU Langone Medical Center offers ambulatory care services throughout Manhattan and in the outer boroughs, Long Island, New Jersey, and Westchester, Putnam, and Dutchess Counties, bringing services directly to where our patients live and work. NYU Langone's medical students, residents, and faculty also provide patient care at Bellevue Hospital Center, the nation's oldest public hospital, and the Medical Center is affiliated with Woodhull Hospital in Brooklyn, Gouverneur Healthcare Services in Manhattan, and the New York Harbor Veterans Affairs Medical Center.

The Medical Center's trifold mission to serve, teach, and discover is achieved on a daily basis through the seamless integration of an academic culture devoted to excellence in patient care, education, and research.

5

Values: professionalism, respect, integrity, diversity, and excellence

4

Patient-centered hospitals offering world-class care 3

Missions: to serve, to teach, and to discover

#### **Patient Care**

Building on our legacy of pioneering medicine, we are also a leader in new healthcare innovations. As part of our strategy to provide access to services at the convenience of patients, we are continually expanding the scope of diagnostic and treatment procedures available on weekends, a time traditionally limited to emergency procedures only. We are also implementing new and convenient tools for patients to access their health information.

In a culture of humanism that emphasizes treating the whole person and not simply the disease, NYU Langone Medical Center is renowned for evidence-based clinical care across a wide array of specialties. Our five leading clinical areas are:

#### Cardiac & Vascular

The Cardiac and Vascular Institute (CVI) is a world leader in cardiovascular care. CVI's cardiac surgeons pioneered minimally invasive heart surgery and mitral valve repair and continue to pave the way in the development of new techniques and procedures for





treating heart rhythm disorders, aortic aneurysms, and congestive heart failure. Our cardiac and vascular physicians work collaboratively with our cardiac rehabilitation team to ensure patients move seamlessly from diagnosis and treatment to the rehabilitation phase of their care.

#### Cancer

The NYU Cancer Institute, a National Cancer Institute-designated cancer center, is recognized for translating knowledge about the roots of cancer into innovative therapies and advanced cancer care in a setting where the patient comes first. At our outpatient cancer centers, which include our Clinical Cancer Center, the Stephen D. Hassenfeld Children's Center for Cancer and Blood Disorders, and the Joel E. Smilow Comprehensive Prostate Cancer Center, we provide care that is simultaneously compassionate and state-of-the-art. Our patients have access not only to the latest prevention, screening, diagnostic, treatment, genetic counseling, and support services for cancer, but also broad access to cutting-edge clinical trials.



#### Musculoskeletal

NYU Langone Medical Center is one of the nation's premier hospitals for orthopaedics, rheumatology, and rehabilitation and is ranked in the top 10 in the country by U.S. News & World Report in all three areas. Our specialists provide the full spectrum of musculoskeletal care, from treating the simplest sprain to the most complex spinal surgery and from chronic pain management to advanced minimally invasive procedures. Inpatient orthopaedic surgery is performed at our world-renowned Hospital for Joint Diseases (HJD), one of only five hospitals in the nation dedicated to orthopaedics. HJD's highly trained specialists are leaders in minimally invasive and robotic knee and hip surgery, joint replacements, and complex spinal surgery. Outpatient services are offered at our new, state-of-the-art Center for Musculoskeletal Care (CMC). which offers patients the full spectrum of outpatient bone and joint care, from degenerative and congenital conditions of the hip, knee, and spine to sports injuries or pain associated with arthritis. Radiology, pain management, physical therapy, and wellness programs are provided at CMC, while same-day surgery is offered at the adjacent Outpatient Surgery Center.

Rusk Rehabilitation, the birthplace of rehabilitation medicine, has been ranked number one in New York for 23 consecutive years and continues to set the standard in rehabilitation care for every stage of life and every phase of recovery. Rusk Rehabilitation is world renowned for the full expanse of adult and pediatric, inpatient and outpatient rehabilitation, whether a patient is recovering from a stroke or other complex neurological trauma or needs physical therapy for a sports injury.

### Neurology & Neurosurgery

U.S. News & World Report has recognized our expertise in these areas and has named us one of the top ten hospitals in the country for neurology and neurosurgery and number two in New York State. Our neurologists are experts in the diagnosis and treatment of a broad spectrum of neurological diseases and deliver integrated care to patients who have had a stroke or are living with epilepsy, cerebrovascular disease, dementia, genetic and degenerative diseases, nerve and muscle problems, headache and pain syndromes, and movement

# 365

OUR MISSION IS ACHIEVED 365 DAYS A YEAR THROUGH THE SEAMLESS INTEGRATION OF AN ACADEMIC CULTURE DEVOTED TO EXCELLENCE IN PATIENT CARE, RESEARCH, AND EDUCATION.

NYU Langone Medical Center's mission is to serve, to teach, and to discover, with service to human health at the center.

disorders. We are also home to the largest multiple sclerosis program in New York.

#### **Children's Services**

From neonatal to pediatric and adolescent care, and from routine well-baby visits to intricate cardiac surgery on newborns, NYU Langone's Hassenfeld Pediatric Center serves our young patients with specialized care from a multidisciplinary team of talented and dedicated neonatal specialists, pediatricians, and pediatric surgeons. General pediatrics, neonatal intensive care, pediatric orthopaedics, pediatric congenital cardiac surgery, childhood cancers, and child and adolescent psychiatry services—just a few of the areas where NYU Langone excels—are all provided in a compassionate, family-centered environment.

#### **Full Range of Services**

In addition to our five clinical priority areas, NYU Langone treats the full range of medical conditions in both inpatient and outpatient settings. Our ambulatory-care network brings our world-class services to members of surrounding communities at numerous practices. When more complex care is needed, we bridge the gap between community-based care and the hospital to provide a seamless healthcare

experience. Our full range of services includes bariatric surgery, dermatology, diabetes and endocrine care, ENT and cochlear implants, gastroenterology, geriatrics, internal medicine, ophthalmology, pain management, psychiatry, pulmonology, radiology, reconstructive surgery, transplantation, urology, women's health, and more.

#### Research

With more than 50 centers, 29 academic departments, and 479,000 square feet of research space, NYU Langone has been the incubator for groundbreaking discoveries, some of which have led to Nobel Prizes, and all of which have helped advance the diagnosis and treatment of disease.

#### **Cancer Institute**

The research mission of the NYU Cancer Institute is to discover the origins of cancer and use that knowledge to eradicate the personal and societal burden of cancer in our community and around the world. It encompasses 15 research programs, organized around the fundamental biology of cancer, and individual types of cancer, such as breast or lung. Translational research, a hallmark of the institute, is finding new ways to integrate the extraordinary strides made in basic research with the ever-growing need for new therapies and approaches in the clinic to a variety of cancers that have remained difficult to treat. To help translate discovery into clinical practice, the NYU Cancer Institute has five primary areas of investigation: cancer targets and novel therapeutics, community and environment, integrative health, molecular oncology/cancer genomics, and immuneand stem-cell-based therapies.

#### Clinical & Translational Science Institute

The Clinical and Translational Science Institute (CTSI), a collaborative effort with the New York City Health and Hospitals Corporation (HHC), is designed to develop ways to more rapidly advance science from the lab to the bedside and out to the community, as well as to explore the underlying causes of health disparities. Enhancing ties between NYU School of Medicine, NYU and HHC researchers, and the community helps enable these scientists to identify health problems and apply their knowledge to promote new evidence-based medicine, thereby reducing disparities in care.

#### **Neuroscience Institute**

The Medical Center is ushering in a new era of neuroscience, expanding on our existing strength and extensive expertise in neuroscience research, focused on the goal of understanding the role of the nervous system in health and in disease. The new Neuroscience Institute is a collaborative enterprise of clinicians and scientists from a wide range of related disciplines, including developmental genetics, molecular systems, and behavioral and clinical neuroscience, across the Medical Center and NYU.

#### **Skirball Institute of Biomolecular Medicine**

More than 275 investigators at the Skirball Institute of Biomolecular Medicine conduct research in the cellular and molecular mechanisms that underlie the way organisms function in four areas: developmental genetics, molecular neurobiology, immunology and pathogenesis, and structural biology. Past research has led to important discoveries in many areas, such as autoimmunity and origins of allergic diseases, cell migration, cell polarity, the structural basis of signal transduction and membrane transport, neural differentiation, synapse formation, and neural networks. Researchers have developed models for host-pathogen interactions in inflammatory disease and for Alzheimer's and Parkinson's diseases. discovered the molecular basis for antidepressant function, and provided key evidence for the role of the K+ channel in the etiology of T-cell-mediated colitis.

#### **Dynamic Breadth of Research**

Interdisciplinary research to address the entire range of biomedical science is conducted in numerous other programs and centers, including the Nelson Institute of Environmental Medicine, one of the oldest and most distinguished centers for research into the health effects of environmental pollution; the Center for Biomedical Imaging, one of the premier imaging research centers in the world; the AIDS Clinical Trial Unit, focused on advancing research, promoting care, and sharing discoveries with the public here and abroad; and numerous emerging research initiatives in population health, including our new Department of Population Health and the Comparative Effectiveness Research Program at our Health Promotion and Prevention Research Center, focused on, among







Our investigators conduct outstanding research in basic, clinical, and translational sciences to bring biomedical discoveries from the laboratory to the bedside.



other health issues, hypertension and colorectal cancer health disparities in African American men.

As the focal point of our translational research efforts, the 13-story Joan and Joel Smilow Research Center houses multidisciplinary research teams dedicated to such fields as cancer, cardiovascular biology, neuroscience, dermatology, genetics, and infectious diseases. And to ensure that our scientists have access to state-of-the-art technology, the Medical Center runs more than 20 core facilities, or shared resources and technology, from analytic chemistry and bioinformatics to tissue banking and vaccine therapy.

#### **Education**

Since 1841, NYU School of Medicine has trained thousands of physicians and scientists who have helped shape the course of medical history and enrich the lives of countless people. An integral part of NYU Langone Medical Center, the School, at its core, is committed to improving the human condition through medical education, scientific research, and direct patient care.

The School has 29 academic departments in the clinical and basic sciences and more than 50 divisions, programs, and centers that provide the broadest

educational experience available anywhere. The School also maintains affiliations with area hospitals, including Bellevue Hospital, one of the nation's finest municipal hospitals, where students provide care to New York City's diverse population, enhancing the scope and quality of their education and training.

#### **Degree and Training Opportunities**

In addition to the medical degree, the School collaborates with New York University to offer dual master's degrees in public administration, public health, clinical investigation, bioethics, and business. NYU Langone is the first academic medical center to offer an innovative three-year MD program, which allows exceptional medical students the opportunity to begin practicing in their chosen specialty earlier and reduces student debt. The School also sponsors more than 65 residency and fellowship training programs, as well as postgraduate medical education courses for practicing physicians. Our Physician Scientist Training Program is designed to give residents and fellows the research skills needed to conduct the highest-caliber science. Our Sackler Institute, a division of the NYU Graduate School of Arts and Science, offers programs in the basic medical sciences, leading to a PhD and, in coordination with the Medical Scientist Training Program, a combined MD/PhD.



#### **Transforming Medical Education**

We are transforming medical education with our new Curriculum for the 21st Century, or C21-a patientcentered and learner-centered curriculum. C21 is a model of medical education based on a spiral curriculum, or pillars, where learning wraps around and builds upon specific areas of medicine. The pillar concept aids students in making connections between the increasingly complicated mechanisms of disease and clinical concepts. This fosters student knowledge both through a study of the scientific underpinnings of disease and, at the same time, through direct patient care. This innovative approach allows students to better connect mechanisms of disease to the care and treatment of patients. Currently, the four pillars in the curriculum are atherosclerosis, diabetes, colon cancer, and tuberculosis. Starting with the incoming class in 2010, students see patients beginning the first week of medical school and follow many of these same patients throughout their four years of study.

The School is also at the forefront of leveraging technology to enhance medical learning through the Program for Medical Education and Technology, which includes web-based training in surgery, as well as a variety of initiatives that use simulation modalities for clinical teaching, including a pioneering online 3-D interactive virtual human body called the BioDigital Human™ and the New York Simulation Center for Health Sciences, a partnership with City University of New York. The Simulation Center, the largest urban health simulation and training facility of its kind in the country, is used by medical students and a variety of health professionals.

**C21** 

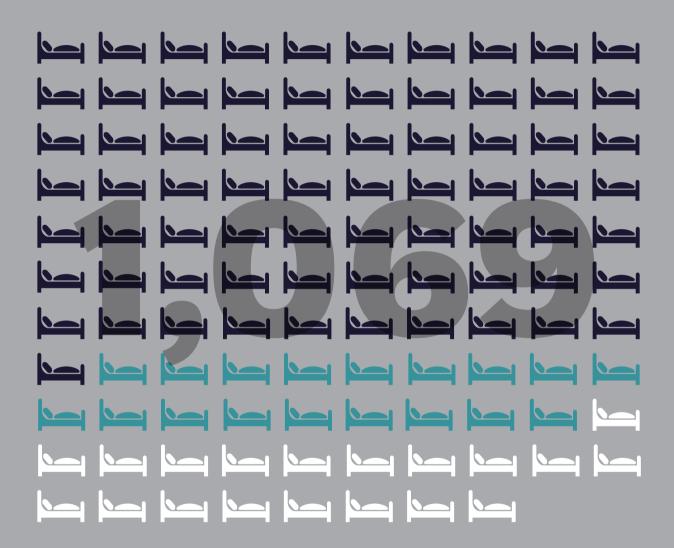
WE ARE TRANSFORMING MEDICAL EDUCATION
WITH OUR PATIENT-CENTERED AND LEARNERCENTERED CURRICULUM

171

YEARS OF TRAINING PHYSICIANS AND SCIENTISTS
WHO HAVE HELPED SHAPE THE COURSE OF
MEDICAL HISTORY

25,000+

NYU SCHOOL OF MEDICINE HAS TRAINED MORE THAN 25,000 PHYSICIANS AND SCIENTISTS SINCE ITS FOUNDING



#### TOTAL NUMBER OF BEDS: 1,069

**TISCH** 705

RUSK 174

HJD 190

### **FACTS & FIGURES**

NYU Langone Medical Center by the numbers - 2012 was a remarkable year.

#### BEDS & ORS

#### PATIENT ENCOUNTERS

31,645

682,502

FACULTY GROUP PRACTICE OFFICE VISITS

#### PROVIDERS

2,135

REGISTERED AND ADVANCED PRACTICE NURSES

FACULTY GROUP PRACTICE PHYSICIANS

#### **TECHNOLOGY TRANSFER**

1,786

831

442
U.S. PATENTS LICENSED

356

ACTIVE LICENSE AGREEMENTS

PRODUCTS BROUGHT TO MARKET

PRODUCTS IN CLINICAL TRIALS

RANK AMONG U.S. UNIVERSITIES IN TOTAL LICENSING REVENUE RECEIVED

All data are cumulative through 12/31/2011

#### GRANT FUNDING

FEDERAL, NON-AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA)

In millions of dollars

#### **STUDENTS & TRAINEES**

MD CANDIDATES

MD/PHD CANDIDATES

POST-DOCTORAL FELLOWS

RESIDENTS AND FELLOWS

2,488

ENDOWED PROFESSORSHIPS

### Our Donors

#### JOAN H. TISCH



In 2012 Joan H. Tisch made a remarkably generous commitment to establish the Preston Robert Tisch Center for Men's Health in honor of her late husband. This tribute follows on the heels of the completion of the Joan H. Tisch Center for Women's Health, a 23,000-square-foot facility on the Upper East Side offering exceptional patient-centered care in more than 18 specialties under one roof

The Preston Robert Tisch Center for Men's Health will offer the same superb level of healthcare, tailored to men's specific needs and located conveniently at Madison Avenue and 55th Street. Mrs. Tisch has long followed her family's tradition of philanthropy. During the early days of the HIV/AIDS epidemic,

she was a frontline fund-raiser and volunteer. She has also, along with other members of the Tisch family, provided substantial support to the ongoing renovations at Tisch Hospital, including the construction of an elevator tower and lobby, as well as the debut of a high-tech inpatient pharmacy.

#### HISTORIC PARTNERS\*

#### \$100 M+

The Druckenmiller Foundation
Helen L. and Martin S. Kimmel
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The Family of Wilma S. and
Laurence A. Tisch
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#### \* The donors listed here have made cumulative gifts of \$10M+ to NYU Langone by the end of fiscal year 2012.

#### \$10-100 M

**American Cancer Society** Leon H. Charney Dr. Jerome S. Coles and Mrs. Geraldine Coles Dysautonomia Foundation, Inc. Edith K. and Frederick L. Ehrman Laurence and Lori Fink Charlotte and Henry E. Fleck Bill & Melinda Gates Foundation Arlene and Arnold Goldstein Sylvia K. Hassenfeld and the Hassenfeld Family Foundation The Irma T. Hirschl Trust Howard Hughes Medical Institute Stanley Allan Isenberg, MD '43 KiDS of NYU Langone

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\$10 M+

\$100 K-500 K

\$2-10 M

American Express Foundation
Anonymous (4)
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**\$500 K-1 M** 2012 GIFT AMOUNT

American Cancer Society
American College of Rheumatology Research and Education Foundation
American Heart Association
Anonymous (2)
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Bezos Family Foundation
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March of Dimes Foundation
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The Louis and Rachel Rudin Foundation, Inc.
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The donors listed here made or recommended gifts or new pledges in fiscal year 2012.

+ Deceased

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## An Extraordinary Team Effort, on a Day When Everything Else Went Wrong

NYU Langone Medical Center's main campus received the full impact of Superstorm Sandy on Monday, October 29, 2012. The strength and angle of approach of two storm systems, plus higher-thannormal high tides due to a full moon, combined

to produce a record storm surge in New York City, causing unprecedented damage to NYU Langone's patient care, research, and education facilities. These images capture scenes from in and around the main campus before, during, and after the storm.

















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