

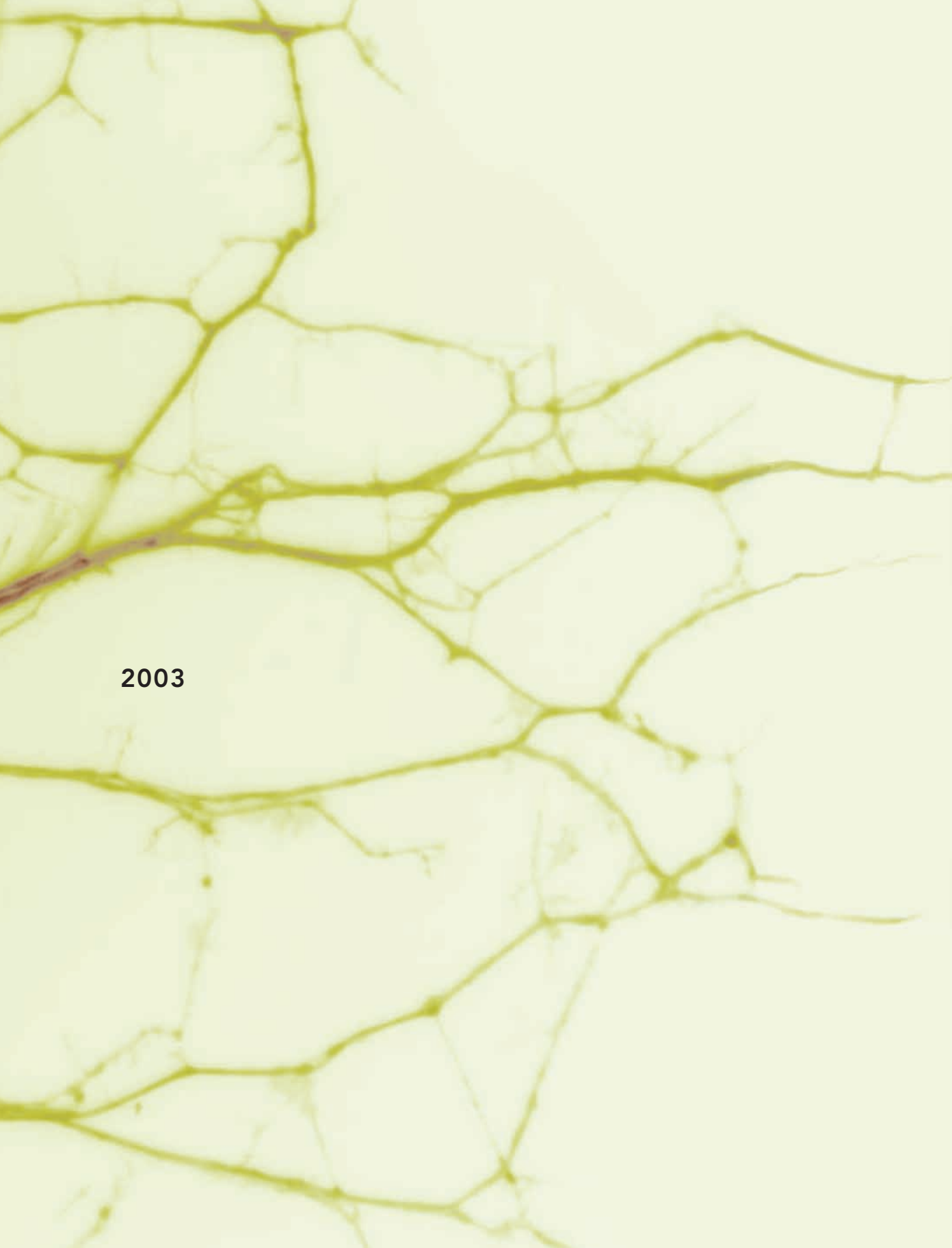


COLUMBIA UNIVERSITY

*College of Physicians  
and Surgeons*

**DEFINING THE FUTURE  
CELEBRATING THE PAST  
2003 ANNUAL REPORT**

Columbia University Medical Center



2003



1928

*Cover & Inside Cover: The stem cell—an undifferentiated cell that can give rise to a variety of cell types—could define the future of therapy for chronic and intractable health problems. Stem cell research has been described as one of medicine’s richest areas of scientific promise to emerge in contemporary times.*

*Page 1: A chemistry laboratory in the new College of Physicians and Surgeons building at the Columbia-Presbyterian Medical Center, 1928.*

## CONTENTS

Dean’s Letter	5	Financial Highlights 2003	40
The Year in Research	9	Trustees Committee of the Health Sciences	42
The Year in Education	15	Advisory Council	42
The Year in Patient Care	21	Administration	43
Highlights 2003	27	Executive Committee of the Faculty Council	44
College of Physicians & Surgeons 2003	31	Department Chairs	44
The Year in Development 2003	32	Interdepartmental Centers	45
Generous Donors 2003	35	Departmental Centers	46
In Memoriam	39	Affiliated Hospitals	48

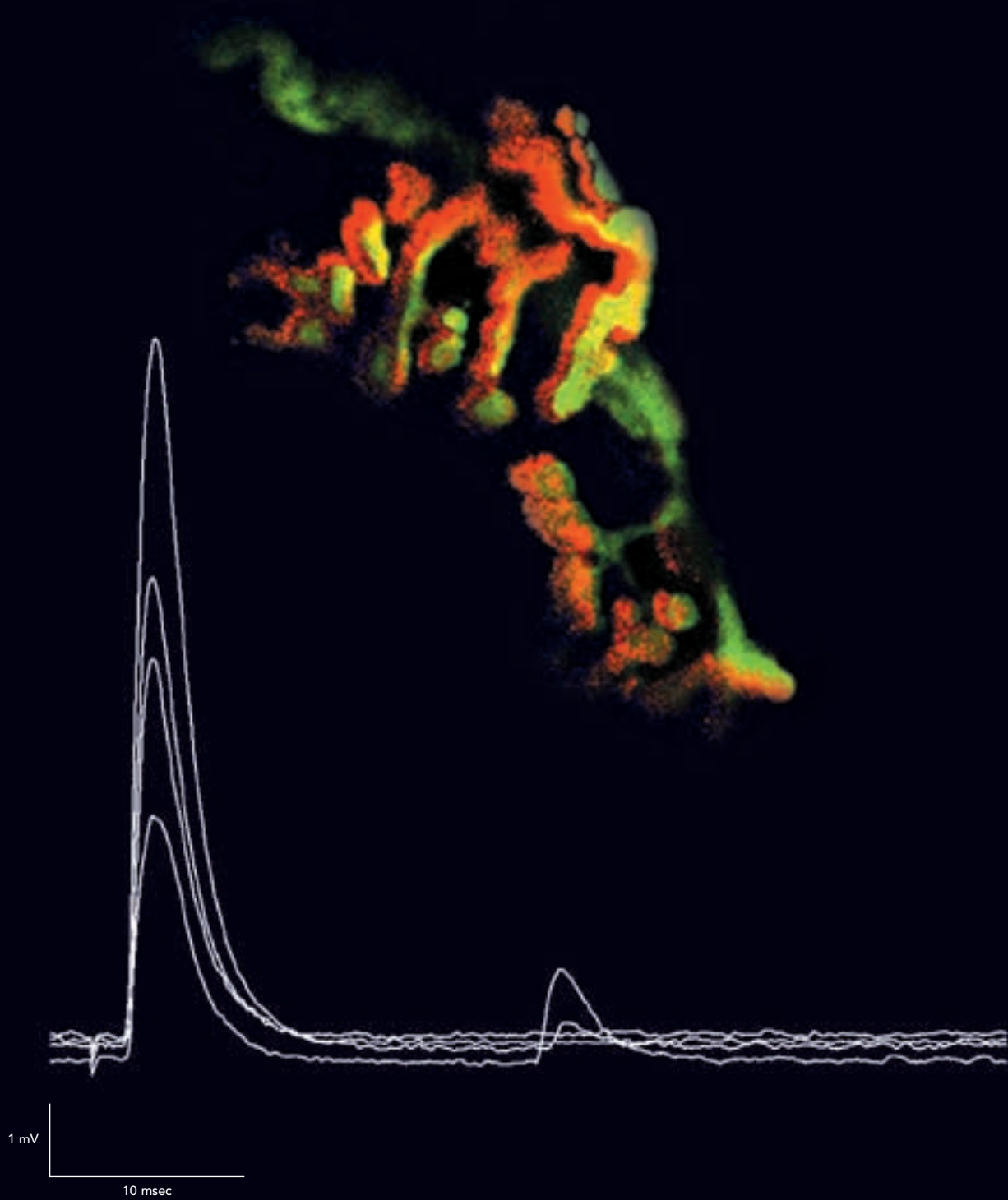


## INTRODUCTION

Rarely do past and future, commemoration and vision, come together in the ways they have over the past year at Columbia University College of Physicians and Surgeons. We celebrated the 75th anniversary of Columbia-Presbyterian Medical Center, the first academic medical center. Columbia University's health sciences schools became known as the Columbia University Medical Center. And we began observing "C250"—the 250th anniversary of Columbia University, which has been home to our medical school since 1767—with a genes and genomes symposium.

We have put into motion the imperatives of an aggressive and integrated strategic plan for Columbia University Medical Center, which will guide our vision and priorities for decades to come. We are about to launch an ambitious capital campaign, unprecedented in the history of the institution, whose goal is to raise more than \$1 billion for medical center initiatives by 2009. And with new institutes, initiatives, and discoveries opening up fields like genomics and proteomics, stem cell research, neuroscience, and chemical biology, we stand poised to take advantage of years of scientific discovery in developing new treatments and therapeutics to ease the burden of human disease.

As we define the future of health and healing, the 2003 Annual Report turns its focus on the past as well as the present, placing the tremendous achievements of the past year alongside the legacy of many decades that converge in this moment of great promise.



## A LETTER FROM THE DEAN

Since my earliest memories, I have gotten great satisfaction from solving problems. That urge has shaped my career as a physician-scientist. I have enjoyed working to solve profound problems related to the nervous system, to the management of science, to the scientific basis of medicine, and to the delivery of patient care: Those goals come together in my current job as executive vice president of our medical center and dean of our medical school.

Although I have limited time to work in my laboratory, where my team and I explore the factors that influence synaptic efficacy and nerve cell survival during embryonic development, my research continues to be a compelling part of my professional life. I find that I cannot turn away from my lab work. The questions remain as urgent to me as ever, and my communication with members of our faculty and physicians around the country keeps me at the forefront of the latest developments in a broad area of subjects. Different branches of science are coming closer together now than ever before. For example, studies of the brain have benefited from studies of malignant cells and their signaling mechanisms. Working in the lab while leading this great institution gives me greater appreciation for the endless possibilities

---

*Confocal image of motor nerve terminal (green) and adjacent acetylcholine(ACh) receptors (red) at a mouse neuromuscular junction. Traces show superimposed postsynaptic responses to ACh quanta released by the nerve terminal.*

medicine offers for understanding the human body in health and disease.

This past year at Columbia has been the kind of year that exemplifies what the academic medical enterprise, at its best, is about. We've honored our many decades of medical and scientific history throughout the year of Columbia's 250th anniversary. We also marked the 75th anniversary of our medical center, the first institution to unite patient care, medical education, and research under one roof in a groundbreaking model known as the academic medical center. We honored the half century of service of Tom Morris, who retired after filling many roles at the medical school and medical center, by inviting medical education's best minds to an education symposium. We hope to continue the symposium every year, with Tom in the front row as committed and interested as ever.

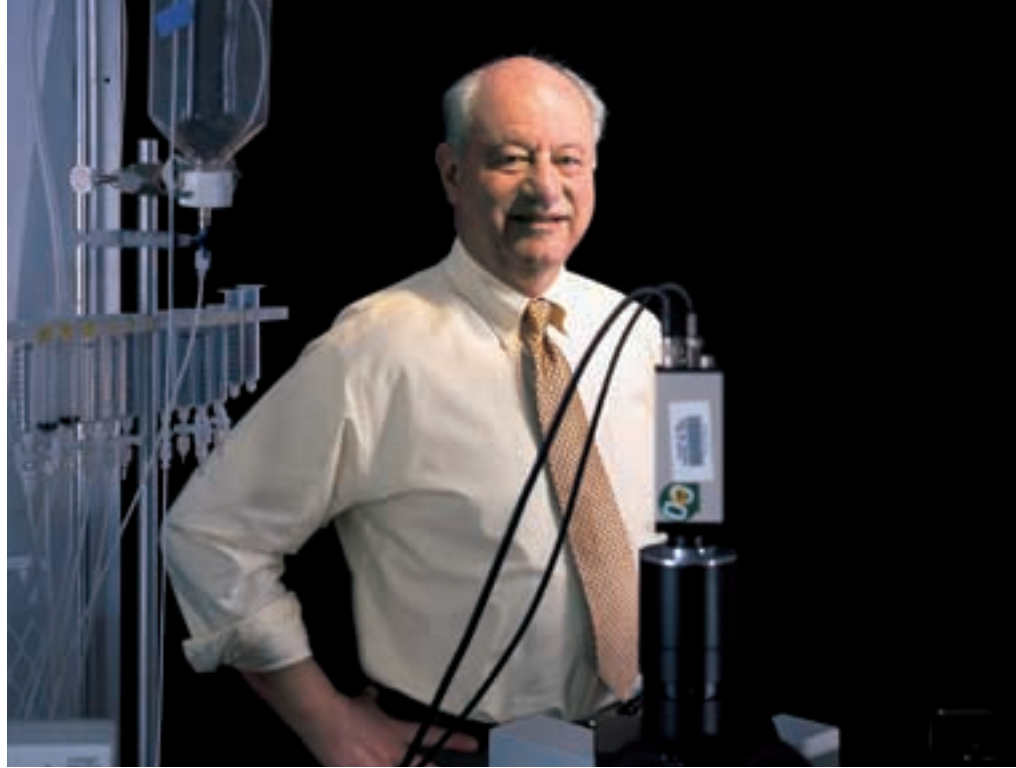
We've also charted our course for the future, embarking upon several exciting ventures in basic, translational, and clinical research. As we continue to break down old barriers and bring disciplines together—an imperative we talked about in last year's annual report—Columbia is also breaking new ground in genomics, stem cell research, chemical biology, and biomedical informatics. We've begun planning ways to integrate the life sciences endeavors of Morningside and medical center researchers. Cross fertilization among disciplines will generate new programs in bionanotechnology, computational biology, chemical biology, and neurosciences. And we're literally breaking new ground as well, with plans for new buildings and the announcement of our most ambitious capital campaign ever.

The word that sums up this year at Columbia, I believe, is momentum. You can feel it all around, in the energy of our students, in the vision of new world-renowned faculty, and in the vigor of longtime faculty members embarking on new and extraordinary initiatives.

Perhaps no better example of this momentum can be found than our Stem Cell Consortium—a community of some 50 researchers from a variety of medical and scientific disciplines united in their investigative efforts to translate the promising basic science of stem cells into clinical treatments that will defeat many chronic and untreatable diseases. Composed of immunologists and oncologists, nephrologists and cardiologists, neurologists and dermatologists, and specialists in diabetes, this multidisciplinary consortium brings some of Columbia's finest minds together to explore one of the richest areas of scientific promise to emerge in decades.

Of course, such a major investment in stem cell research also puts Columbia on the front lines of a public debate that is both controversial and politically charged,





a debate that asks important questions about the very origins of life. But that's exactly where Columbia ought to be. In the service of science and medicine, in our ongoing quest to ease the burden of human disease, we will not shy away from the controversial or the challenging. Stem cell research, and the debate that surrounds it, will have an enormous impact not only on how we treat disease and injury, but on the very way in which we conduct science in this country.

I'm proud to bring you this report about a momentous year at Columbia University College of Physicians and Surgeons. It seems only fitting that, in the year in which we celebrate the visionary founding of the medical center, we are moving forward with a new strategic plan and capital campaign that will transform this campus and that has the promise to do as much, if not more, to define the future of health and healing in the next century as the birth of the academic medical center did during the past century. We have enormous challenges ahead, but the challenges are clearly defined in our strategic plan and capital campaign goals. We are optimistic because the standards set by the students and faculty make us optimistic. Our challenge is to create programs and facilities that match their extraordinary talents.

Gerald D. Fischbach, M.D.

Executive Vice President for Health and Biomedical Sciences  
and Dean of the Faculties of Health Sciences and Medicine



## THE YEAR IN RESEARCH

In 1950, three years before James Watson and Francis Crick elucidated the double helix design of DNA, Columbia biochemist Erwin Chargaff published findings on the DNA molecule's composition that helped lead the scientists to their understanding of DNA's structure. "Chargaff's Rules" helped science progress into the age of the genome and into an understanding of health and disease based on the most fundamental building blocks of the human system.


Now, more than half a century's worth of basic research later, Columbia has made several major investments toward the critical next step: taking the basic science of genomics and human stem cells and translating it into effective treatments for disease, with several initiatives that will define the future of health and healing for generations to come.

Columbia's new Stem Cell Consortium, launched in 2003, brings together the expertise of more than 50 P&S investigators studying various aspects of stem cell biology—everything from a possible role in treating neurological diseases like Parkinson's and Alzheimer's to how they might help address critical public health challenges such as diabetes and obesity. The consortium got an early

---

*A laboratory technician in an overcrowded, makeshift lab at the medical center, circa 1964. The opening of the William Black Medical Research Building in 1966 helped alleviate conditions like the one depicted here.*



A blurred photograph of a laboratory environment. In the center, a person is visible from the chest down, wearing a white lab coat and gloves, working at a laboratory bench. The bench is cluttered with various pieces of laboratory equipment, including pipettes, tubes, and containers. Some of the equipment has orange and red caps. The background shows shelves with more laboratory supplies. The overall image is out of focus, emphasizing the text overlay.

THOMAS M. JESSELL, PH.D., IS ONE OF MORE THAN  
50 INVESTIGATORS STUDYING MULTIPLE ASPECTS OF  
STEM CELL BIOLOGY THROUGH THE STEM CELL  
CONSORTIUM ESTABLISHED AT P&S IN 2003.





boost with two multimillion dollar gifts—\$8 million from civil engineer and real estate developer Bernard Spitzer and \$3 million from the Jean I. and Charles H. Brunie Foundation. These gifts put Columbia at the forefront of stem cell research, which, as Executive Vice President and Dean Gerald Fischbach says, has “the potential to usher in a new era of restorative medicine that was unimaginable just a few years ago.”

Similarly remarkable advances in individualized medicine are part of the promise of Columbia’s new Center for Excellence in Genomic Research, created this year with support from the National Human Genome Research Institute in one of the first projects funded since the complete sequencing of the human genome. Headed by principal investigator Jingyue Ju, head of genome sequencing and chemical biology at the Judith P. Sulzberger, M.D., Columbia Genome Center, the center will focus on three new genomic technologies: massive parallel DNA sequencing that will allow a genome to be sequenced on a chip, nanoscopic DNA arrays for measuring how many genes are active at any given time in single cells, and real-time monitoring of multiple copies of genes and their movement. Using these technologies, Columbia scientists, led by Nobel Laureate Eric Kandel, will study how genes function in neurons to control learning and memory and how they regulate human behavior.

Columbia researchers are leading national efforts to identify new genetic risk factors for Alzheimer’s disease. Only one risk factor has been confirmed so far, and determining which other genetic factors interact to cause the disease could prove critical to effective treatment strategies. As part of the National Institute on Aging’s aggressive new Alzheimer’s Disease Genetic Initiative, Columbia’s Taub Institute for Research on Alzheimer’s Disease and the Aging Brain, led by Richard Mayeux and Michael Shelanski, will coordinate the work of 10 centers nationwide as researchers pursue an ambitious plan to gather genetic information on 1,000 new families affected by Alzheimer’s disease.

With a \$12 million gift from the Russell Berrie Foundation, Columbia will use a genetic approach to open up another front in the war on diabetes with its new Russell Berrie Foundation Program in Cellular Therapies for Diabetes. Cellular therapy, which uses genetic and other means to manipulate cells so that they can take over the function of diseased and damaged tissue, could lead to a new and theoretically endless source of insulin-producing islet cells. Successfully engineering islet cells has the potential to spare people with diabetes the need for

insulin injections and the devastating complications associated with diabetes, such as blindness, amputation, and kidney failure.

Many of the most profound genetic questions about human disease are asked at the interface of cell biology and chemistry, an area that Lasker Prize-winning cell biologist James E. Rothman calls “likely to be most fruitful for cutting through the fog of genomic complexity” to reveal how normal physiology goes awry in the disease process and what can be done about it. This year, the renowned Dr. Rothman will join the P&S faculty to help establish the new Center for Chemical Biology, an initiative that builds on the strengths of Columbia’s rich faculty expertise in chemistry, biochemistry, pharmacology, and medicine in a quest to translate molecular and genetic findings to novel therapeutics.

Mining the vast array of genomic and proteomic information for its maximum therapeutic potential will require extensive investment in the monumental task of sorting, organizing, and resynthesizing this information. This complex wheat-from-chaff process is the purview of the field of computational biology, and Columbia is bringing together its many faculty members with expertise in this area in an integrated program within the new Center for Computational Biology and Bioinformatics. Headed by biochemist Barry Honig and bioinformatics expert Andrea Califano, a leading new recruit to the P&S faculty, the center launched three collaborative pilot projects this year and plans to incorporate a Ph.D. program.



## THE YEAR IN EDUCATION

When visionary philanthropist Edward Harkness brought together Columbia University and Presbyterian Hospital to create what became Columbia-Presbyterian Medical Center in 1928, the result was a revolutionary new approach to medicine: the academic medical center. An integral part of this wildly successful experiment has always been the education mission. Columbia, like all the great academic medical centers that have followed it, has created a hothouse environment in which future Erwin Chargaffs, Virginia Apgars, and Eric Kandel learn from the finest minds in medicine.

Distinguished clinician-educators like Dana Atchley, Robert Loeb, and Alexander Gutman are remembered and emulated by former students long after the students have become respected physicians and scientists in their own right.

The decision, during our 75th anniversary year, to rename the first academic medical center Columbia University Medical Center reaffirms the essential role of that teaching mission. It puts the “university” and its medical and health professions students literally front and center. And the new name reflects a freshly reinvigorated commitment to the central role of medical education at Columbia.

This year, the College of Physicians and Surgeons underwent the rigorous

---

*A fourth-year P&S student presents a case to third-year students, 1956.*







TODAY'S P&S CLASSES REFLECT SOCIETY'S MIX OF GENDER, RACE, AND NATIONALITY. UNLIKE P&S LECTURE HALLS DURING MUCH OF THE 20TH CENTURY, ANY EDUCATIONAL SETTING TODAY IS FILLED WITH BOTH WOMEN AND MEN.

scrutiny of the Liaison Committee on Medical Education (LCME), a process that all medical schools face every seven years to maintain accreditation. In granting Columbia reaccréditation, the LCME site visitors had few criticisms. Nonetheless, the LCME recommended, as does our strategic plan, that the institution invest in, strengthen, and honor the education mission at a level that matches the investment in and attention to research and clinical care.

As part of the second phase of the strategic planning process for education, we formed a Committee for Excellence in Health Science Education, composed of the academic deans of all medical center schools and a number of department chairs. The committee is charged with identifying ways to integrate and improve delivery of the education resources throughout the medical center and the university. Contributing to these plans will be tightly focused research from a new program at the Center for Education Research and Evaluation, headed by Director of Research Mark Graham and aimed at creating a culture of scholarship and education research in the medical school.

Ultimately, Columbia's education mission rests on the shoulders of its outstanding faculty. Recruiting and retaining the top experts in their fields to guide academic clinical departments continues to be a priority, exemplified this year by new leadership in the Departments of Medicine and Obstetrics and Gynecology. Award-winning clinical teacher and researcher David A. Brenner, a gastroenterologist whose work has contributed enormously to the understanding of liver repair, comes to Columbia from the University of North Carolina to head the Department of Medicine. Columbia's own Mary D'Alton, a national leader in the field of maternal-fetal medicine and director of the Sloane Hospital for Women, was named chairwoman of the Department of Obstetrics and Gynecology. And noted cardiology researcher Andrew Marks, recruited to P&S in 1997 to create a molecular cardiology program, became chairman of the Department of Physiology and Cellular Biophysics, adding to his responsibilities as the Clyde and Helen Wu Professor of Medicine, director of the Center for Molecular Cardiology, and editor-in-chief of the *Journal of Clinical Investigation*.

To reward faculty members who have an outstanding passion for teaching, Columbia has announced the establishment of the Glenda Garvey Academy of Medical Education. Named for the late P&S professor Glenda Garvey, the academy will award seed grants to support faculty proposals for novel approaches in teaching, empowering educators to devote more "protected time" to educating students than

their clinical and research obligations usually allow. This innovative approach will help revitalize the curriculum by incorporating cutting-edge pedagogical techniques and by elevating the education mission to its rightful level of importance alongside research and patient care.

The “hidden curriculum”—the subtle life lessons in medical practice that professors teach every day by example, rather than by lesson or examination—often shapes the novice medical student into the fledgling physician just as much as hours spent in laboratories and lectures. Medical students learn to be compassionate, ethical, skilled clinicians and scientists through mentoring relationships with professors who have walked this path before them. These vital relationships have remained casual and unpaid at many medical schools, however, and are often the first to suffer when clinical and research responsibilities compete for a professor’s time. This year, Columbia joined a growing number of American medical schools that have established a paid cadre of advisory deans whose support will guide students through their professional development. Each of the five deans advises about 20 percent of each P&S class, meeting weekly with first-year students, every other week with second-year students, and monthly with third- and fourth-year students.

Columbia’s students, eager to help define the future of health and healing not only in the United States but around the globe, have long sought educational opportunities overseas. Now, the new Office for Global Health Training and Education will coordinate the international opportunities. Spearheaded by Joanna Rubinstein, senior associate dean for institutional and global initiatives, the office will nurture an ever-growing body of medical professionals with the skills and knowledge to tackle difficult global health problems, improve health outcomes, and reduce inequalities in access to health care around the world.





## THE YEAR IN PATIENT CARE

Columbia has always led the way in bringing the latest medical advances from the bench to the bedside. In 1956, two pioneers of cardiac catheterization, Andre Cournand and Dickinson Richards, earned a Nobel Prize. The first U.S. amniocentesis test, the first in utero fetal surgery, the first successful pediatric heart transplant, and the first use of a laser beam to treat a patient all took place at Columbia. During the past year, we have heralded a number of other “firsts” in patient care.

Columbia physicians, led by surgeons Emina Hui-na Huang and Beth Schrope, performed the first gallbladder removal using a robotic surgical approach—a marriage of minimally invasive surgery and traditional “open” surgery. The robotic approach reduces trauma to the patient, requires less anesthesia, and allows faster recovery time.

P&S assistant professor of surgery Michael Argenziano, who has been using minimally invasive surgical approaches to correct atrial fibrillation, performed the first completely closed-chest robotic atrial fibrillation surgery to be done without putting the patient on a heart/lung machine.

As the result of clinical trials led by P&S professor and chairman of surgery, Eric Rose, the FDA approved permanent use of the HeartMate VE left ventricular assist device, a pump that takes over the pumping of a weakened left

---

*Doctors and nurses attend a patient in a ward in the old Presbyterian Hospital, circa 1925.*





PATIENT CARE CAN TAKE PLACE IN MANY SETTINGS IN TODAY'S MEDICAL CENTER. HERE, DR. DOLORES J. BACON, ASSISTANT CLINICAL PROFESSOR OF MEDICINE, EXAMINES MARTIN ZAPATA AT THE NEW YORK-PRESBYTERIAN FAMILY HEALTH CENTER ON WEST 181<sup>ST</sup> STREET.



ventricle and lowers the mortality rate for patients with end-stage heart failure by nearly 50 percent.

Columbia also became the first major academic medical center to install the electronic ICU—a new patient monitoring system that uses a camera, speakers, and computers to let critical care nurses and doctors in another building monitor patients and communicate with them and staff in the ICU. The eICU desks, equipped with computer monitors, allow doctors and nurses to observe patients and receive up-to-the-minute heart-rate and electrocardiogram data as well as medication, laboratory, and other clinical information. They can even ring a “doorbell” and talk to patients and unit staff. Research has shown that the eICU improves patient monitoring and enhances outcomes, with mortality dropping by 30 percent and complications decreasing by 40 percent.

As the birthplace of the Apgar Score, the first facility for premature infants, and the fields of pediatric neurology and radiology, Columbia maintains a commitment to providing the most advanced care for children in the most compassionate setting. This commitment dates back more than a century. In 2003 the state-of-the-art Morgan Stanley Children’s Hospital opened on the Columbia campus. The 265,000-square-foot, 10-story facility houses inpatient and diagnostic services, a neonatal intensive care unit, a pediatric intensive care unit, a dedicated bone marrow transplant unit, and floors with specialized services, including cardiology, neurology, oncology, and surgery. Family-centered care was a bedrock principle in the design of the new hospital: along with 100 medical/surgical beds, 41 pediatric critical-care beds, and 50 neonatal critical-care beds, the building features inviting, toy-filled child life centers and comfortable family lounges.

One of the most devastating disorders to affect children is spinal muscular atrophy (SMA), a motor neuron disease that is the leading genetically determined killer of infants in the United States. Though not as well known as other genetic disorders like Huntington’s disease, cystic fibrosis, and Tay-Sachs, SMA affects as many as a thousand new infants each year, most of whom will not live to see their second birthdays. The SMA Clinic at the Columbia Pediatric Neuromuscular Disease Center brings together the interdisciplinary expertise in neurology, genetics, rehabilitation medicine, pulmonology, and orthopedics that is essential to providing the best possible care for children with SMA. Dramatic research discoveries over the past several years hold out powerful prospects for a cure for SMA, and the new clinic also sets the stage for vital clinical research.

Many common neurological disorders were first described and diagnosed by Columbia P&S scientists through its internationally renowned Neurological Institute. As the advances of the Decade of the Brain have brought dramatic new therapeutic interventions for stroke, neurotrauma, seizures, and other serious neurological disorders that were once considered untreatable, a new specialty has formed: neurocritical care. That evolving specialty has found a home at Columbia, where the newly formed national Neurocritical Care Society will work to improve outcomes for patients with life-threatening neurological illnesses by promoting quality patient care, professional collaboration, research, specialty training and education, and advocacy.

For decades, Columbia has worked in partnership with its neighbors in the Washington Heights/Inwood community to address the neighborhood's diverse health care needs and reduce the health care disparities affecting the people of northern Manhattan. This year, Columbia's community-based programs found a unified home in the new Center for Community Health Partnerships, the first center of its kind at Columbia. In addition to providing health promotion, disease prevention, and health care services, CCHP also supports research into health care disparities and promotes curricular developments that foster cultural competency and encourage community-based work as a career path for faculty.

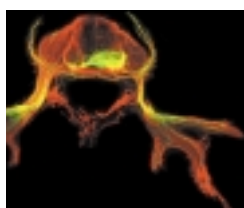
To ensure excellence and innovation in patient care at Columbia, the clinical mission now has a full-time voice in the dean's office. In March 2003, Joseph Tenenbaum, Edgar Leifer Professor of Clinical Medicine, began serving as senior associate dean for clinical affairs, charged with improving patient care and responding to concerns of the clinical faculty. Among the priorities for the "patient care dean": a commitment to patient service excellence and a focus on patient safety, error reduction, and evidence-based demonstration of quality across all clinical departments. Under Dr. Tenenbaum's leadership, the Faculty Practice Organization has launched several research projects to demonstrate how Columbia's patient management represents an improvement over the usual standard of care, initially focusing on several key areas including pediatric cardiology, thoracic surgery, and neurology with an emphasis on epilepsy.



When the College of Physicians and Surgeons became part of the world's first academic medical center 75 years ago, no one could have predicted the extraordinary advances celebrated in this year's annual report. But as we look back on the discoveries and developments of this single year in the context of the broader achievements of three-quarters of a century, we can see a marked path of excellence paved by the visionary scientists and healers who created this institution and the many others who followed in their footsteps. This year's accomplishments join the list of achievements that form the legacy dedicated to one constant goal: easing the burden of human disease.

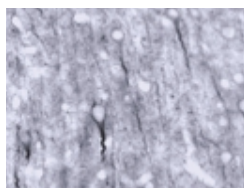
## HIGHLIGHTS 2003

**RESEARCH** Early markers of the dangerous arterial buildup known as atherosclerosis are found in very young children. Greater body mass levels in children as young as 2 and 3 appear to be associated with higher fasting insulin levels, which in turn are paired with high levels of C-reactive protein, a known predictor of heart disease, cardiovascular problems, and type 2 diabetes. The more physically fit children are, P&S researchers found, the lower their levels of C-reactive protein.



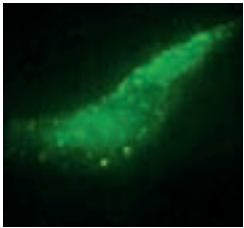
Using mouse embryonic stem cells, researchers produced and isolated motor neurons that make appropriate connections to muscles during development. The mouse motor neurons, inserted into the spinal cord of an embryonic chick, mimicked the behavior of the chick's neurons. These experiments offer hope that stem cells may be used to restore coordinated movements in animal models of diseases like amyotrophic lateral sclerosis and other neurodegenerative disorders and that this therapy may ultimately be applied to humans.

Breast density, not a woman's age or hormonal status, is the most important factor in the ability of mammography to detect tumors, according to radiology research. In a review of more than 27,000 consecutive screening sessions, mammography detected 99 percent of cancers in fatty breasts, but only 48 percent of cancers in dense breasts—which are more prevalent in young women. The research suggests that women with dense breasts may benefit from ultrasound as an adjunct method for detecting breast cancer.

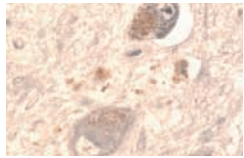


A previously unknown estrogen receptor, ER-X, has been identified on the surface of the cell membrane in neuronal cells. Scientists who discovered the new receptor theorize that it may play a role in the neuroprotective effect that estrogen gives to cells injured by a stroke or neurodegenerative disease. ER-X may point the way to new drugs that can lessen the risk of stroke or minimize the loss of neurons in Alzheimer's disease.

Essential tremor is as much as 20 times more common than Parkinson's disease but much more mysterious. It affects up to 6 percent of the population, but its genetic origins are murky. Now, scientists believe they are on the verge of isolating the genetic and environmental factors associated with the movement disorder. The cerebellar cortex—the “little brain” that helps control movement—appears to be the place where essential tremor develops. Researchers used magnetic resonance spectroscopy to show that the brain chemical N-acetyl-aspartate was 20 percent lower in the cerebellar cortex of essential tremor patients than in control patients.



Much more is now known about the important cancer-fighting p53 molecule, thanks to new findings by researchers. For years, cancer researchers have tried to take advantage of p53's ability to stimulate cell suicide to kill cancer cells, but in some stubborn cancers, p53 remains stuck in the cytoplasm and can't migrate to the nucleus to put cell suicide in motion. A newly identified protein dubbed Parc now appears to be the agent responsible for holding p53 in the cytoplasm. Research suggests that either reducing the concentration of Parc or blocking its ability to bind to p53 could make some hard-to-treat cancers vulnerable to chemotherapy. Meanwhile, another team at Columbia has discovered a previously unknown promoter sequence that p53 uses to coordinate the actions of more than 60 genes to block a damaged cell from becoming a tumor.



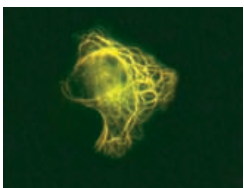
Best known as a promoter of inflammation in arthritis, the COX-2 enzyme has been identified by scientists as a promoter of neuronal death in Parkinson's disease. This research indicates that COX-2 inhibitors like Celebrex and Vioxx may be able to slow cell death in patients with Parkinson's disease.

P&S researchers are helping to lead a seven-year national study of the effectiveness of live-donor liver transplants and optimal care for donors and recipients. Funded by the National Institute of Diabetes and Digestive and Kidney Diseases, the 20-center study will track 1,000 patients eligible for live donor liver transplantation, an option that has become increasingly important as more and more people with end-stage liver disease await transplant. In the United States, 17,000 patients waited for livers while fewer than 5,000 cadaver livers were transplanted in 2001.

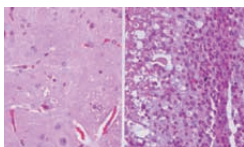


Columbia investigators have identified a second coat color gene in mice, which they've named mahoganoid. (The first, agouti, was identified in the early 1990s.) The yellow mutation in the agouti mice is associated with obesity, while mahoganoid produces a reddish brown coat and a leaner mouse. The gene could offer a novel approach to regulating body weight and a promising target for future weight-reduction therapies if it's also involved in weight regulation in humans.

Patients with HIV often develop resistance to the powerful anti-HIV drug "cocktails" after taking multiple combinations of the medications. A national multicenter study found that a new combination of drugs, including two protease inhibitors instead of one, can reduce the viral load in a substantial proportion of HIV patients who have already taken several anti-HIV drugs.



New findings about two mutations associated with the little-known neurodegenerative disorder Charcot-Marie-Tooth may provide a better understanding of how cells die in that disease and in more common disorders such as ALS and Parkinson's disease. Mutations in the protein NF-L lead to abnormal bundles of neuronal proteins called neurofilaments, which may cause the peripheral nerve degeneration that disables people with Charcot-Marie-Tooth.



The aptly named molecule RAGE (receptor for advanced glycation end-products), first identified at P&S a decade ago, plays a role in such diseases as diabetes, atherosclerosis, and Alzheimer's by escalating the body's immune and inflammatory responses against its own cells and tissues, worsening the disease. This year, P&S scientists added multiple sclerosis to the list of diseases aggravated by RAGE. A receptor blocker known as sRAGE reduces the disease's symptoms in mice by up to 80 percent.

Brain cells called astrocytes may play a role in Alzheimer's disease. Named for their starlike shape, astrocytes provide nutrients and insulation for neurons and are found in areas of the brain where the excess beta-amyloid peptide associated with Alzheimer's accumulates. This year, scientists at P&S and Stanford reported that normal astrocytes can literally consume and destroy beta-amyloid. These exciting findings raise the possibility that activating astrocytes could help free the brain of harmful levels of the peptide.

## EDUCATION

The new Center for Student Wellness offers "one-stop shopping" for such student problems as how to handle career anxiety and how to find ways to help students balance their academic, emotional, and physical lives. The center opened in Bard Hall in July 2002.

Young doctors must master a diverse set of skills to handle the wide-ranging demands and intense activity of emergency medicine. Columbia's new emergency medicine residency began training its inaugural group of 10 residents in July. The new residency, plus a new fourth-year subinternship in emergency medicine, will offer students and graduates preparation for this fast-growing specialty.



Columbia's physical therapy program, one of the oldest in the country, began offering a three-year doctor of physical therapy degree, replacing the two-year master's degree program. The new DPT degree will keep Columbia's physical therapy program competitive as similar programs across the country shift to the doctorate model.

Other universities can now take advantage of the rich electronic curriculum resources developed at Columbia, thanks to new marketing and licensing agreements. Hosted at [www.cumedlearn.org](http://www.cumedlearn.org), the interactive educational tools include atlases of neuroanatomy, pathology, histology, the abdomen, and the foot.



P&S expanded summer programs for minority students as part of its efforts to attract more minority students. In the Hunter College/P&S Summer Research Program, minority college students work in P&S labs with faculty mentors. The Minority Medical Education Program brings minority college students to campus for coursework in the sciences, clinical experiences, and MCAT preparation. To recruit more minorities into Ph.D. programs, the Graduate School of Arts and Sciences sponsors students in basic science labs.



Joining forces with the New York Times Company Foundation, P&S offered a first-of-its-kind five-day immersion course in neuroscience for journalists to help them accurately translate scientific discoveries into stories for the public. The course introduced more than a dozen reporters from television network news programs, wire news services, major newspapers, and other news outlets to neuroscience basics, imaging of brain function, genetic approaches to neurological and psychiatric illnesses, and learning and memory.

## PATIENT CARE

General Electric Medical Systems awarded a \$2.47 million grant to Columbia and New York-Presbyterian Hospital to fund a collaborative venture to develop a new combination of magnetic resonance imaging technology and fluoroscopy for use in interventional neuroradiology. The goal is to replace X-ray fluoroscopy with endovascular magnetic resonance navigation that will provide real-time visualization of the brain and vessels, improving diagnosis and treatment of strokes. The hospital's patients will have first access to the technology, but GE plans to market it to other hospitals.

The New York State Psychiatric Institute hosted the first National Medical Student Conference on Psychiatry and Neuroscience in November 2002. Speakers included P&S Dean Gerald Fischbach and Nobel Laureate Eric Kandel.



Columbia's Dialysis Center, the only dialysis center in upper Manhattan, celebrated its opening with a ribbon-cutting ceremony in July 2002. The center, which offers peritoneal dialysis in addition to its 24 chronic dialysis stations, reached its full capacity of 100 patients at the end of 2002.

P&S, the Pediatric Cancer Research Foundation, and the University of Giessen in Germany sponsored the first international symposium on childhood and adolescent non-Hodgkin's lymphoma in New York in April 2003. The symposium featured the latest advances in childhood and adolescent cancers, young adult hematological malignancies, stem cell transplantation, and immunobiology.



More than 3,000 residents of Washington Heights and Inwood took part in the second annual Take Time for Health Day, held along St. Nicholas Avenue in June. More than 1,000 participants took advantage of free informational screenings for high blood pressure, asthma, diabetes, glaucoma, and HIV/AIDS. A highlight of Take Time for Health Day was the presentation of the Community Builders Awards, honoring performer Bette Midler for her contributions to cleaning up New York and P&S professor Rafael Lantigua for his efforts to improve the health of community residents.

## COLLEGE OF PHYSICIANS &amp; SURGEONS 2003

Total enrollment, Fall 2003	1,400	Degrees granted, Fiscal 2003	410
M.D. program	615	M.D. program	142
M.D./Ph.D. program	113	M.D./Ph.D. program	12
Graduate programs	640	Ph.D. program	33
Certificate programs	32	Occupational therapy	44
		Physical therapy	36
Full-time faculty	2,286	M.S. in nutrition	14
Total faculty	5,097	Master's in medical informatics	9
Living alumni	7,000	Other master's degrees	109
Academic departments	24	Ph.D. in medical informatics	3
Budget	\$929 million	Certificate in psychoanalysis	8
Endowment	\$802 million		
Endowed chairs	112		
Research support	\$316 million		



COLUMBIA UNIVERSITY

*College of Physicians  
and Surgeons*

## THE YEAR IN DEVELOPMENT 2003

Philanthropy, vision, and opportunity converged during the past fiscal year to enrich the environment for research, education, and patient care at P&S. During fiscal 2003, our generous friends and alumni contributed \$84,695,935. Many of the programs made possible by these gifts dovetail with the strategic plan for the Columbia University Medical Center, while others respond to new needs and opportunities. A new mechanism for unrestricted donations, the CUMC Priorities Fund, was created in 2003 to support strategic initiatives, including scholarships and recruitments, and has already received \$1.4 million.

We value the generosity and vision of our donors as we embark on a capital campaign for the medical center. Highlighted below are examples of P&S benefactors and the projects that will help define the future of research, education, and patient care at P&S and beyond.

Herbert and Florence Irving were named honorary co-chairs of the CUMC Capital Campaign in recognition of their many years of leadership, advocacy, and generous support throughout the medical center.

An anonymous donor made an unprecedented commitment for four years of support for the Huntington's Disease Society of America Center of Excellence, a clinical and research facility that provides medical and emotional support programs to patients and their families.

The Russell Berrie Foundation further increased its support for diabetes research, reflecting the commitment and generosity of the late Russell Berrie and his wife, Angelica Berrie, who has taken over leadership of the business and philanthropic activities of the Russ Berrie company and foundation. The gift will allow Columbia to pursue pioneering studies aimed at manipulating cells so they can be implanted to produce insulin, moving us closer to a definitive treatment for diabetes. This research, which holds the promise of developing techniques that can be applied to other conditions as well, will partner Columbia scientists with leading investigators from other institutions.

Every recent study of space and campus life has emphasized the need for pleasing and functional space for study, relaxation, and intellectual interaction. The P&S Class of 1970 collaborated with the Dean's Office and the Housing Office to renovate the Bard Hall Student Lounge. The lounge, opened in early 2003, has significantly enhanced those aspects of student life.

An unrestricted gift to the CUMC Priorities Fund from the estate of Curtiss Cummings (a 1943 P&S graduate) will support strategic initiatives, including student scholarships.



Loren Eng and Dinakar Singh provided major funding to launch a new Spinal Muscular Atrophy Clinic, a facility that combines patient care and translational research to advance progress in understanding and treating the most common genetically determined cause of infant death. Dr. Darryl De Vivo, the C. Sidney Carter Professor of Neurology and Professor of Pediatrics, directs the new clinic.

Herbert and Linda Gallen's gift endowed the Herbert and Linda Gallen Professorship of Clinical Neurological Surgery. Dr. James G. McMurtry III was appointed the first Gallen Professor in 2003.

A bequest from the late Katharine Graham completed the Caitlin Tynan Doyle Professorship in Neurology. Critical momentum for this professorship, and for expansion of research into epilepsy and women's health, was provided last year thanks to the generosity of Mark and Dorothy Doyle. Dr. Martha J. Morrell is the Caitlin Tynan Doyle Professor of Clinical Epilepsy.

The Robert Wood Johnson Foundation continued its support of the Minority Medical Education Program and related initiatives designed to provide research experience for minority students and encourage them to pursue careers in medicine and research.

Longtime friends of the medical center, Stephen and Constance Lieber, continued their support of the Lieber Center for Schizophrenia Research. The center has been an important catalyst in promoting innovative collaborations between clinical and basic scientists, setting the stage for advances in the treatment and prevention of schizophrenia.

A gift from the Leon Lowenstein Foundation will benefit the Parkinson's disease research of Dr. Stanley Fahn, the H. Houston Merritt Professor of Neurology, and the Movement Disorders Laboratory, as well as the work of Dr. Peter S. Jensen.

The Lyme Disease Association and Time for Lyme Inc. joined Columbia's dedicated benefactors with a major gift that marked the cornerstone in the initial funding of the nation's first Lyme Disease Research Center at Columbia University Medical Center. The Lyme Disease Research Center will focus on chronic lyme and other tick-borne diseases to advance our understanding of the symptoms, causes, diagnostic techniques, and treatments of these devastating diseases.

Maxcor Financial Group joined the ranks of Columbia's corporate partners with a generous five-year commitment to the medical center. Funding will support the Maxcor Program for Overweight Education and Reduction (POWER) in the Department of Pediatrics, targeting childhood obesity and diabetes. A Maxcor-funded assistant professorship in the Department of Medicine's Division of Rheumatology will allow for expansion of research in rheumatoid arthritis and other autoimmune diseases, such as lupus.

Paul and Irma Milstein made a generous commitment to the Department of Surgery that will help ensure the continued excellence of its groundbreaking initiatives in the field of surgical science.

The Muscular Dystrophy Association continued its strong partnership with CUMC, energized by the tireless advocacy of financier Michael Beier (left). Executive Vice President and Dean Gerald Fischbach recognized their extraordinary efforts and success by establishing the Michael Beier/MDA Wings over Wall Street ALS Research Fund.





Robert Sorrel, age 13, set a fine example for his peers (and elders) by requesting donations to the Naomi Berrie Diabetes Center's pediatric program in lieu of gifts for his bar mitzvah in January 2003.

Thanks to the generosity of Mortimer D. Sackler, M.D., and the Sackler family, the understanding of genetic and developmental causes of a wide range of psychiatric illnesses has expanded greatly in recent years. The family's foundation continues to support the work of the Department of Psychiatry investigators at Columbia's Sackler Institute for Developmental Psychobiology.

A multiyear commitment from Bernard Spitzer will enable CUMC scientists to undertake broad-based efforts to characterize the development, function, and survival of stem cell-generated dopamine neurons, with the aim of unlocking the secrets of Parkinson's disease.

Henry and Marilyn Taub continued their generous support for efforts to identify individuals at risk for Alzheimer's disease and devise new therapies to prevent or delay disorders of the aging brain with a gift to the Taub Institute for Research on Alzheimer's Disease and the Aging Brain.

Dr. Clyde Wu, a Columbia University trustee and 1956 P&S graduate, continued his generous support by making a commitment to establish the fourth Wu professorship at P&S.



## GENEROUS DONORS 2003

### \$1 MILLION & MORE

American Heart Association  
 American Cancer Society  
 Anonymous (4)  
 The Russell Berrie Foundation  
 The California Endowment  
 Estate of Curtiss Cummings, M.D. '43  
 Herbert and Linda Gallen  
 GlaxoSmithKline  
 Estate of Katharine Graham  
 Howard Hughes Medical Institute  
 The Robert Wood Johnson Foundation  
 Juvenile Diabetes Research  
 Foundation International  
 Stephen and Constance Lieber  
 Leon Lowenstein Foundation  
 Marubeni America Corporation  
 Maxcor Foundation  
 Muscular Dystrophy Association  
 Paul and Irma Milstein  
 The New York Academy of Medicine  
 Parkinson's Disease Foundation  
 Pediatric Cancer Research Foundation  
 The Sackler Foundation  
 Bernard Spitzer  
 Judith P. Sulzberger, M.D. '49  
 Henry & Marilyn Taub Foundation  
 Henry and Marilyn Taub  
 Clyde and Helen Wu Family Foundation  
 Clyde Y. Wu, M.D. '56

### \$500,000 – \$999,999

AMDeC Foundation, Inc.  
 American Diabetes Association  
 Anonymous  
 Becton Dickinson and Company  
 Bernard and Shirley G. Brown  
 Jean I. & Charles H. Brunie Foundation  
 Charles H. Brunie Jr.  
 Citizens Communications Company  
 Cystic Fibrosis Foundation  
 Mark and Dorothy T. Doyle  
 The Dyson Foundation  
 Foundation for Heart Failure Research  
 Louis V. Gerstner Jr.  
 Estate of Phyllis Studner Grant  
 Human Frontier Science Program  
 Wesley J. Howe Family Foundation  
 Leukemia & Lymphoma Society  
 T.J. Martell Foundation For Leukemia,  
 Cancer and AIDS Research  
 G. Harold & Leila Y. Mathers Charitable  
 Foundation  
 William J. Matheson Foundation, Inc.  
 Suzanne C. Murphy  
 Loren Eng and Dinakar Singh

**\$100,000 – \$499,999**

215 East 68th Street, L.P.

A M Medica Communications, Ltd.

William Acquavella

American Federation for Aging Research

American Foundation for Suicide Prevention

Estate of Ralph E. Alexander, M.D. '36

Alzheimer's Disease &amp; Related Disorders

Association, Inc.

Anonymous

The Arthritis Foundation

Engender International, Inc.

Banbury Fund, Inc. No. 1

Robert L. Burch III

The Burroughs Wellcome Fund

The Chicago Community Trust

The Jane Coffin Childs Memorial Fund

Communities Foundation of Texas, Inc.

Elizabeth K. Dollard Charitable Trust

Doris Duke Charitable Foundation

Eli Lilly &amp; Company

Eye Surgery Fund Inc.

The Fan Fox and Leslie R. Samuels Foundation

Fidelity Non-Profit Management Foundation

Robert L. Fine Cancer Research

Lab Foundation

Robert Lance Fine, M.D.

The Foundation Fighting Blindness

Foundation for Diabetes Research

The Michael J. Fox Foundation

FRAXA Research Foundation

Friends of Incarnation Children's Center

Louis V. Gerstner Jr. Foundation

The Colleen Giblin Foundation

Albert B. Glickman Family Foundation

Albert B. Glickman

Arnold P. Gold Foundation

Lillian Goldman Charitable Trust

The Horace W. Goldsmith Foundation

Du Val R. Goldthwaite

The Stewart and Constance

Greenfield Foundation

Stewart H. Greenfield

The Helis Foundation

Hereditary Disease Foundation

The William and Flora Hewlett Foundation

The Irma T. Hirschl Trust

Estate of Margarita Silva Hutner

The I.W. Foundation, Inc.

Janssen Pharmaceutica, Incorporated

Sidney Kimmel Foundation for

Cancer Research

R. Duff Kurland and Carol Nusinow

Estate of Charles R. Lachman

Lance Armstrong Foundation

Fondation Leducq

Helaine Heilbrunn Lerner

The Joseph LeRoy and

Ann C. Warner Fund, Inc.

Judith S. Levi

Hirschell E. and Deanna Levine

The Loewy Family Foundation

Marc Lustgarten Pancreatic Cancer Foundation

Lyme Disease Association, Inc.

Darren M. Manelski

March of Dimes Birth Defects Foundation

William A. Marquard

The McKnight Endowment Fund

Merck &amp; Company, Incorporated

Medical Illness Counseling Center

Alonzo H. Mourning

National Multiple Sclerosis Society

Suzanne C. Murphy Foundation

National Alliance for Research

Samuel I. Newhouse Foundation

Donald E. Newhouse

Open Society Institute

Ortho-McNeil Pharmaceutical

Ara Parseghian Medical Research Foundation

Pediatric Cancer Foundation

The Pfizer Foundation  
 Pfizer, Inc.  
 PMK Associates Inc.  
 Procter & Gamble Company  
 The Procter & Gamble Distributing Company  
 Project A.L.S. Inc.  
 Robin Hood Foundation  
 Blanchette Hooker Rockefeller Fund  
 Rockefeller Brothers Fund, Inc.  
 Ambassador Felix George Rohatyn  
 Aaron, Martha, Isidore N. & Blanche Rosansky  
 Foundation  
 Louis & Emanuel G. Rosenblatt Foundation  
 Emanuel G. Rosenblatt  
 The Richard & Hinda Rosenthal Foundation  
 Hinda G. Rosenthal  
 E. Robert Roskind, Esq.  
 Research to Prevent Blindness  
 Radiological Society of North America  
 Jack and Susan Rudin  
 The Sallie Foundation  
 The Sandler Family Supporting Foundation  
 Joan and Michael Schneeweiss  
 Estate of Rolf H. Scholdager, M.D. '50  
 Thomas P. Sculco, M.D. '69  
 The Beatrice & Samuel A. Seaver Foundation  
 Harold and Joan Seiden  
 Alexandrine & Alexander L. Sinsheimer Fund  
 Alfred P. Sloan Foundation  
 The SO Charitable Trust  
 The Jerry & Emily Spiegel Family Foundation  
 Jerry and Emily Spiegel  
 Bernard & Anne Spitzer Charitable Trust  
 The Starr Foundation  
 Alexander & Margaret Stewart Trust  
 Richard J. Stock, M.D. '47  
 Estate of Christal Sudau  
 The Sulzberger Foundation, Inc.  
 The Tamarind Foundation  
 Time for Lyme, Inc.

United States Surgical Corporation  
 University of Pennsylvania  
 Francis J. Walsh & Donna J. Walsh Foundation  
 Francis J. Walsh Jr.  
 Whitehall Foundation, Inc.  
 Joseph H. Willner, M.D.  
 Wyeth-Ayerst Pharmaceuticals  
 James and Cecilia Tse Ying Foundation  
 Cecilia Ying  
 Zo's Fund for Life

#### **\$50,000 – \$99,999**

Association of American Medical Colleges  
 The Actors' Fund of America  
 Vanguard Charitable Endowment Program  
 Peter P. Agoston  
 Rita Allen Foundation  
 The American Academy of Allergy,  
 Asthma & Immunology  
 American Educational Research Association  
 American Institute for Cancer Research  
 American Parkinson Disease Association  
 The Arthritis Foundation  
 American Society of Clinical Oncology  
 Estate of Stuart M. Berger  
 Alan & Ruth Borenstein Foundation  
 Braen Stone Industries, Inc.  
 Jeffrey Brewer  
 Carolyn and Kenneth D. Brody Foundation  
 Kenneth D. Brody  
 The Burch Foundation  
 CRH Foundation  
 Cancer Research Fund of the Damon Runyon  
 Cancer Research Institute  
 Nettie Wade Chase  
 The Children's Brain Tumor Foundation  
 Cigna Foundation  
 Dr. and Mrs. Herbert G. Cohen  
 Concern Foundation  
 The Charles A. Dana Foundation, Inc.  
 Dermatology Foundation



Dystonia Medical Research Foundation  
 Clarence & Anne Dillon Dunwalke Trust  
 East End Residence, L.P.  
 Alfred C. Eckert, III  
 Charles Edison Fund  
 The EJLB Foundation  
 The Ellison Medical Foundation  
 The ERD Family Foundation, Inc.  
 Hilliard Farber and Dr. Gloria Farber  
 Gail Fawcett Trust  
 Gail Fawcett  
 Flagler Park Estates L.P.  
 Charles A. Flood  
 Gambro 1998 Charitable Trust  
 Claude P.J. Ghez, M.D.  
 New York Community Trust  
 Estate of Francis Goelet  
 Diane Goldberg Foundation  
 Albert F. Gordon  
 The Julie Gould Foundation  
 GSCP (NJ), L.P.  
 Cecily Harris  
 Diana Helis Henry  
 Howmedica Osteonics  
 Huntington's Disease Society of America  
 The Japan Foundation  
 George Frederick Jewett Foundation  
 Jonathan Manufacturing  
 Kaiser Family Foundation  
 Richard and Lynne Kaiser  
 The Katz Foundation  
 Lewis Katz  
 Quentin J. Kennedy Foundation  
 Quentin J. and Mary E. Kennedy  
 Helen and Martin Kimmel Foundation  
 Martin and Helen Kimmel  
 Roger King  
 The Thomas D. Klingenstein & Nancy D.  
 Perlman Family Fund  
 Thomas D. and Nancy D. Klingenstein

Jan Krukowski  
 Burton J. Lee III, M.D. '56  
 Hilary J. and Ethel E. Lipsitz  
 Macula Vision Research Foundation  
 American Health Assistance Foundation  
 Adrienne Helis Malvin  
 Leonard Marsh  
 Mead Johnson Nutritional Group  
 Paul R. Mendelsohn  
 Dr. Jose Luis Martinez Moreno  
 National Foundation For Cancer Research  
 Kidney & Urology Foundation of America, Inc.  
 National Parkinson Foundation  
 National Psoriasis Foundation  
 National Niemann-Pick Disease Foundation  
 Orthopaedic Scientific Research Foundation  
 Audrey Wallace Otto  
 Jewish Community Endowment Fund  
 Christopher Reeve Paralysis Foundation  
 Fanny & Stephen Rosenak Foundation  
 Louis & Rachel Rudin Foundation  
 Irving Sager  
 Novartis Pharmaceuticals Corporation  
 Sarofim International Management Co.  
 Faye Sarofim  
 Michael & Helen Schaffer Foundation  
 Mrs. Helen Stephany Schaffer  
 The Dorothy Schiff Foundation  
 Scios, Inc.  
 Norman J. Seiden  
 The Ned & Emily Sherwood Family Foundation  
 Emily Lyzer Sherwood  
 Ned L. Sherwood  
 Siemens Medical Solutions USA, Inc.  
 Solvay Pharmaceuticals  
 Estate of Vincent Strack, M.D. '34  
 The Strahl Family Foundation  
 Ellen and Marty Strahl  
 Martha W. Straus-Harry H. Straus  
 Foundation Inc.

Adele Hall Sweet  
 Swim Across America  
 Joseph & Arlene Taub Foundation  
 Joseph and Arlene Taub  
 Mount Sinai School of Medicine  
 The Triple "C" Foundation  
 Valcor Engineering Corporation  
 Martha G. Welch, M.D. '71  
 Waldo Foundation Incorporated  
 Samuel Waxman Cancer Research Foundation  
 The Helen Hay Whitney Foundation  
 Norman & Rosita Winston Foundation, Inc.

## IN MEMORIAM

We mourn the recent loss of these friends of  
 the College of Physicians & Surgeons:

Harriet W. Ackley  
 Mrs. Russell B. Aitken  
 Ralph E. Alexander, M.D. '36  
 Leslie Baer, M.D. '63  
 Frances Bernheim  
 Michael Beier  
 Stanley Bernstein, M.D. '49  
 Russell Berrie  
 Margaret Bevans, M.D. '35  
 Robert G. Blabey Jr., M.D. '67  
 Kenneth T. Calder, M.D. '44  
 Dr. Richard Defendini  
 Dorothy R. Fabian, Ed.D.  
 Pauline B. Forbath  
 Royal H. Gibson Sr.  
 Pauline Goldfine  
 Ruth J. Guttmann, M.D.  
 Bob L. Hope  
 Wesley Jack Howe  
 Lawrence Van Ingen  
 Gilbert Kerlin  
 Alfred Lerner  
 Flora A. Levine  
 Louis D. Liskin  
 Dr. Frank W. Longo  
 Henry M. Marx  
 Stephen M. McCoy, M.D. '37  
 Robert M. Miller, M.D. '46  
 Donald M. Palatucci, M.D. '66  
 George A. Perera, M.D. '37  
 Lois Quig  
 Daniel Sciarra, M.D.  
 Madeline C. Stabile  
 Vincent A. Stabile  
 Ping Tai  
 Felix H. Vann, M.D. '33

## FINANCIAL HIGHLIGHTS 2003

Fiscal 2003 brought substantial change to Columbia's Office of Budget and Finance. The office is headed by the new chief financial officer, Michael O'Connor, Ed.D., vice president and senior associate dean for budget and finance. Dr. O'Connor, who has been at the medical center for more than 24 years, serving as chief operating officer and chief financial officer for the Mailman School of Public Health, launched an aggressive program of restructuring and reorganization to establish a more open, accountable, and streamlined system for financial management at P&S and throughout Columbia University Medical Center.

The office has been organized along six areas of function: university budget and planning, medical center budget monitoring and control, clinical finance, business operations, financial controls and management, and hospital affiliations. This new model allows financial staff to focus on key areas of responsibility and provides medical center staff with clear lines of access to get budgetary questions answered.

Quarterly budget meetings are a hallmark of the new budget process initiated during the fiscal year, a process that places an emphasis on communication and openness. The finance team meets quarterly with all department chairs and department administrators, involving school leadership in many of these meetings. This effective management tool has led to a more transparent budget process, with broad sharing of information, well suited to addressing the fiscal challenges Columbia faces.

These challenges include the ravages of a nationwide economic downturn that continued throughout most of this fiscal year. Although some leading indicators began to point toward a possible recovery toward the end of the period, the financial picture nationwide and in the New York area in particular in fiscal 2003 was one of caution and cutbacks. In such austere times, the growth of the P&S operating budget—up by 8.4 percent, from \$857 million to \$929 million—demonstrates our institutional strength and vigor. Thanks to aggressive fiscal house-keeping, P&S has been able to clean up the majority of preexisting deficits.

A great deal of the growth during this fiscal year can be attributed to Columbia's research activity, which grew at an impressive rate. During the final year of the five-year period during which the NIH budget was doubled, P&S was again able to attract a large share of those new dollars, thanks to the strength of the faculty and the new vision and talents added by recent recruits. Research awards from federal and nonfederal sources in FY 2003 totaled

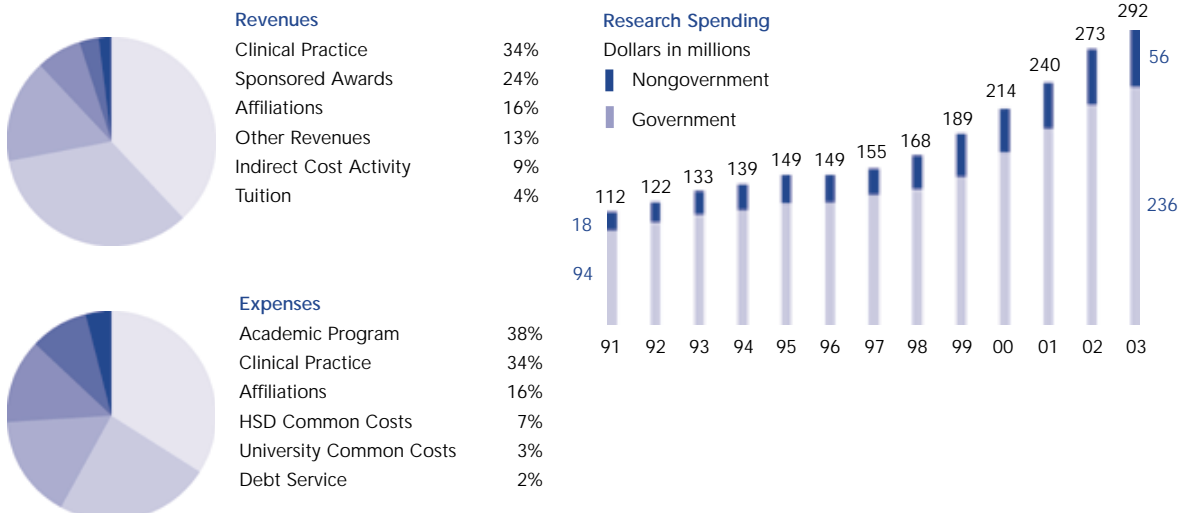
\$316 million, a 6.1 percent increase over the previous year. Sponsored funding grant spending, meanwhile, climbed from \$280 million to \$300 million, an increase of 7 percent.

P&S is among the top 10 percent of U.S. medical schools in NIH awards for 2002 (the last year for which data are available), and several of our departments stood out in the NIH rankings. The Department of Rehabilitation Medicine ranked fourth in NIH awards among similar departments nationwide, while the Department of Obstetrics and Gynecology ranked fifth, and the Department of Physiology and Cellular Biophysics ranked eighth.

When the economy is soft, many individuals and charitable organizations tend to reduce philanthropic giving. During a year in which many major nonprofit organizations reported declines in donations, however, the income generated through private and foundation giving to Columbia in fiscal 2003 remained at approximately the same level as the previous year. Given the lackluster performance of the stock market during fiscal 2003, the steady pace of giving to Columbia is a mark of the strong commitment our donors feel for the medical center and its programs. This partnership will be critical to the success of the medical center's capital campaign, *Defining the Future*.

Our overall financial health is strong, as seen through the aggregate fund balance of more than \$200 million, not counting our endowment. The school's endowment market value stood at approximately \$802 million at the end of the fiscal year. This represents a decline of 4.5 percent due in part to market fluctuations and in part to support for program activities in a number of clinical departments. Endowed professorships grew to 112 from 107. The largest single source of revenue, faculty practice income, grew by 3 percent over the past year, growth that was matched by a similar increase in faculty practice expenses.

Although the economic picture has begun to brighten, we can expect continued financial pressures in the years to come, particularly as the NIH budget doubling period ends, eliminating a major source of increases in research funding. If we are to move forward toward the visionary goals set forth in our new strategic plan, we must invest wisely and judiciously in the world-class faculty, programs, and facilities that have made P&S one of the nation's top-ranked medical schools.



### Columbia University Trustees Committee on the Health Sciences

Clyde Y.C. Wu, M.D.

Chairman

Stephen H. Case

Marilyn Laurie

Joan E. Spero

Esta E. Stecher

Savio Tung

Faye Wattleton

Harold Varmus, M.D.

Evan Davis

Ex-officio

Lee Bollinger

Ex-officio

David Stern

Ex-officio

Walter Burke

Emeritus

Henry L. King

Emeritus

Margaret Mahoney

Emerita

Lionel Pincus

Emeritus

Jerry Speyer

Emeritus

Angelica Urra Berrie

Advisory Member

Herbert Irving

Advisory Member

JoAnn M. Murphy

Advisory Member

Judith Sulzberger, M.D.

Advisory Member

### Columbia-Presbyterian Health Sciences Advisory Council

Roger Barnett

Jeremiah A. Barondess, M.D.

Page Morton Black

Frederic A. Bourke

Charles Brunie

Bryan J. Carey

John K. Castle

Thomas L. Chrystie

Maureen A. Cogan

Ron Cohen, M.D.

Stephen Cohen, M.D.

James J. Daly

Robert K. Dresing

Abigail Black Elbaum

Richard Elias, M.D.

Gloria Farber, Ed.D.

Phyllis R. Farley

James W. Fordyce

Louis Gary

Philip Goelet, Ph.D.

Sandra O. Gold, Ed.D.

Ernest Haas

Daniel Hauser, Ph.D.

Helen S. Hintz

Herbert Irving

Robert E. Jacoby

Ellen Jewett

Barbara Jonas

Vera Joseph, M.D.

Henry L. King

E. Peter Krulewitch

Eugene Lang

Burton J. Lee III, M.D.

Deanna Levine

Constance Lieber

Hildegard Mahoney

Phyllis Mailman

John Manice

Paul A. Marks, M.D.

Ariane M.H. Matschullat

William F. May

Guri McKinnell

G. Allen Mebane

Constance Milstein

Shelby Modell

JoAnn M. Murphy

Joseph M. Murphy

William Murray

Fred F. Nazem

Arnold L. Oronsky, Ph.D.

Gordon Pattee

Ponchitta Pierce

John Pinto

Irene Pollin

Stuart Rabin

Hinda Rosenthal

Lindsay Rosenwald, M.D.

E. Robert Roskind

Joan Schneeweiss

Mark Schwartz

G. Lynn Shostack

Ruth Siegel

Wilma Bulkin Siegel, M.D.

John Stafford

Judith Sulzberger, M.D.

Suzanne Sunshine

Doris Tananbaum

Jeff C. Tarr

Vincent Tese

John Tognino

Doris F. Tulcin

Gerard M. Turino, M.D.

Kathleen Walas

Audrey Weiderlight, Ph.D.

Sidney Weinberg Jr.

Dayna J. Wilkinson

Joseph D. Williams

Ruth A. Wooden

Clyde Y. Wu, M.D.

Emeriti

Mathilde Krim, Ph.D.

Arnold S. Relman, M.D.



### Administration, Columbia University Medical Center and College of Physicians & Surgeons

Lee C. Bollinger  
President of the University

Alan Brinkley, Ph.D.  
Provost of the University and  
Dean of the Faculties

Gerald D. Fischbach, M.D.  
Executive Vice President for  
Health and Biomedical Sciences  
and Dean of the Faculties of  
Health Sciences and Medicine

Marian Jakubiak, M.P.A.  
Special Assistant to the Executive  
Vice President and Dean

David Hirsh, Ph.D.  
Executive Vice President for  
Research

Marilyn L. Castaldi, M.B.A.  
Chief Communications Officer

Harvey R. Colten, M.D.  
Vice President and  
Senior Associate Dean for  
Academic Affairs

Kevin E. Kirby, M.S.  
Vice President and  
Senior Associate Dean for  
Administration and Chief  
Operating Officer

Michael P. O'Connor, Ed.D.  
Vice President and  
Senior Associate Dean for  
Budget and Finance

Kathleen O'Donnell, M.P.H.,  
M.B.A., M.A.  
Vice President and Senior  
Associate Dean for Clinical  
Administration

Eric Rose, M.D.  
Associate Dean for  
Translational Research

Joanna Rubinstein, Ph.D., D.D.S.  
Senior Associate Dean for  
Institutional and Global  
Initiatives

John J. Scales, M.Div.  
Vice President for Development

Allan Formicola, D.D.S.  
Vice Dean of the Center for  
Community Health Partnerships

Edward Shortliffe, M.D., Ph.D.  
Deputy Vice President and  
Senior Associate Dean for  
Information Technology

Joseph Tenenbaum, M.D.  
Senior Associate Dean for  
Clinical Affairs

Ross Frommer, J.D.  
Deputy Vice President for  
Government and Community  
Affairs and Associate Dean

Therese Larivee, M.B.A.  
Deputy Vice President for  
Budget and Finance

Susie Stalcup, B.A., CFP  
Deputy Vice President for  
Development

Jeffrey Davis, J.D.  
Associate Vice President for  
HIPAA Compliance/Privacy  
Officer

Marion Greenup, M.Ed., M.P.H.  
Associate Vice President for  
Administration

Galene Kessin, B.A.  
Associate Vice President for  
Human Resources

Robert Lemieux, B.A., M.S.  
Associate Vice President for  
Facilities Management

Pat Molholt, Ph.D.  
Associate Vice President and  
Associate Dean for Scholarly  
Resources

Frank Moore, Ph.D.  
Associate Vice President for  
Information Resources

Richard Sohn, Ph.D.  
Associate Vice President and  
Associate Dean for Research  
Administration and Director,  
Grants and Contracts

Jeffrey A. Szmulewicz  
Associate Vice President for  
Biomedical Communications

Karen Berger  
Assistant Vice President for  
Practice Development &  
Outreach

Niyazi Bodur, Ph.D.  
Assistant Vice President

David M. Cohen  
Assistant Vice President

Bonita Enochs  
Assistant Vice President for  
External Relations & Director of  
Publications

George Gasparis  
Executive Director, Institutional  
Review Board

Gary Herrmann  
Assistant Vice President  
for Budget, Finance  
& Administration

James F. McShane  
Assistant Vice President for  
Public Safety

Daniel W. Morrissey  
Assistant Vice President

Renee Riley  
Assistant Vice President for  
Residence Halls, University  
Housing

Robin Rosenbluth  
Assistant Vice President,  
Development

Laura Shuford

Assistant Vice President,  
Development

Frederic Kass, M.D.

Senior Associate Dean for  
Clinical Affairs and Interim  
Chairman, Psychiatry

Linda Lewis, M.D.

Senior Associate Dean for  
Student Affairs

Robert Lewy, M.D.

Senior Associate Dean for Faculty  
Affairs and Health and Safety

James Lieberman, M.D.

Senior Associate Dean for  
Clinical Services and Associate  
Vice President

John T. Herbert, M.D.

Senior Associate Dean,  
Harlem Hospital Center

Helen Drury

Associate Dean for Faculty  
Practice Outpatient Facilities  
and Associate Vice President

Stefanie Goldberg

Associate Dean and Associate  
Vice President for Faculty  
Practice Operations

Ron Drusin, M.D.

Associate Dean for Education

Walter Franck, M.D.

Associate Dean, Bassett  
Healthcare

Andrew Frantz, M.D.

Associate Dean for Admissions

Ellen Giesow, M.P.H.

Associate Dean for  
Administrative Affairs, Harlem  
Hospital Center

Michael Herman, M.D.

Associate Dean, St. Vincent's  
Hospital in Bridgeport

Hilda Y. Hutcherson, M.D.

Associate Dean for Diversity  
and Minority Affairs

Richard Kessin, Ph.D.

Associate Dean for  
Graduate Affairs

Donald Kornfeld, M.D.

Associate Dean

Anke Nolting, Ph.D.

Associate Dean for Alumni  
Relations and Development,  
College of Physicians and  
Surgeons

Noel Robin, M.D.

Associate Dean,  
Stamford Health System

William Rosner, M.D.

Associate Dean, St. Luke's-  
Roosevelt Hospital Affairs

Jaime S. Rubin, Ph.D.

Assistant Vice President and  
Senior Assistant Dean for  
Research Administration

Fred Loweiff, M.P.A.

Assistant Dean for Graduate  
Affairs

#### Executive Committee of the Faculty Council

Gerald D. Fischbach, M.D.

Executive Vice President for  
Health and Biomedical Sciences  
and Dean of the Faculties of  
Health Sciences and Medicine

Barbara Barlow, M.D.

Professor of Surgery

David Brenner, M.D.

Bard Professor and Chairman  
of Medicine

Jeanine D'Armiento, M.D.

Assistant Professor of Medicine

Salvatore DiMauro, M.D.

Lucy G. Moses Professor of  
Neurology

Beth Ann Dittkoff, M.D.

Assistant Professor of Surgery

Thomas J. Garrett, M.D.

Professor of Clinical Medicine

Michael Gershon, M.D.

Professor and Chairman of  
Anatomy

Arnold R. Kriegstein, M.D.

John and Elisabeth Harris  
Professor of Neurology (in  
Pathology and the Center for  
Neurobiology and Behavior)

Jeremy Luban, M.D.

Richard J. Stock Associate  
Professor of Medicine and  
Microbiology

Thomas Ludwig, Ph.D.

Assistant Professor of Anatomy  
and Cell Biology

Ramon E. Parsons, M.D.

Avon Foundation Associate  
Professor of Pathology and  
Medicine (in the Institute for  
Cancer Genetics and Herbert  
Irving Cancer Center)

B. Timothy Walsh, M.D.

Ruane Professor of Psychiatry

#### Department Chairs

Anatomy & Cell Biology

Michael D. Gershon, M.D.

Anesthesiology

Margaret Wood, M.D.

Biochemistry & Molecular  
Biophysics

Arthur G. Palmer, Ph.D.  
(acting chair)

Biomedical Informatics

Edward Shortliffe, M.D., Ph.D.

Dermatology

David R. Bickers, M.D.

Genetics & Development  
Frank Costantini, Ph.D.  
(acting chair)

Medicine  
David Brenner, M.D.

Microbiology  
Saul Silverstein, Ph.D.

Neurological Surgery  
Robert A. Solomon, M.D.

Neurology  
Timothy Pedley, M.D.

Obstetrics & Gynecology  
Mary E. D'Alton, M.D.

Ophthalmology  
Stanley Chang, M.D.

Orthopaedic Surgery  
Louis U. Bigliani, M.D.

Otolaryngology/Head & Neck  
Surgery  
Lanny Garth Close, M.D.

Pathology  
Michael Shelanski, M.D., Ph.D.

Pediatrics  
John M. Driscoll, M.D.

Pharmacology  
Robert S. Kass, Ph.D.

Physiology & Cellular  
Biophysics  
Andrew Marks, M.D.

Psychiatry  
Frederic Kass, M.D. (acting chair)

Radiation Oncology  
Peter B. Schiff, M.D., Ph.D.

Radiology  
Philip O. Alderson, M.D.

Rehabilitation Medicine  
James S. Lieberman, M.D.

Surgery  
Eric Rose, M.D.

Urology  
Carl A. Olsson, M.D.

## Interdepartmental Centers and Institutes and Directors

Arteriosclerosis Research Center  
Alan Tall, M.D.

Audubon Biomedical Science  
and Technology Park  
Mitch Gipson

Center for Bioethics  
Ruth Fischbach, Ph.D.  
Robert Klitzman, M.D.

Center for Emergency Medicine  
James Giglio, M.D.

Center for Family Medicine  
Kathleen Klink, M.D.

Center for Molecular Cardiology  
Andrew Marks, M.D.

Center for Molecular Recognition  
Arthur Karlin, Ph.D.

Center for Neurobiology and  
Behavior  
John Koester, Ph.D.

Center for Psychoanalytic  
Training and Research  
Robert A. Glick, M.D.

Center for Radiological  
Research  
Eric J. Hall, D.Phil., D.Sc.

Center for the Study of Society  
and Medicine  
David J. Rothman, Ph.D.

Center for Vascular and Lung  
Pathology

Charles P. Felton  
National Tuberculosis Center at  
Harlem Hospital  
Paul W. Colson, Ph.D.

Cleft and Craniofacial Center  
Jeffrey A. Ascherman, M.D.

Columbia-Rockefeller Center  
for AIDS Research  
Scott Hammer, M.D.

Columbia University  
Immunology Center  
Kathryn Calame, Ph.D.

Gertrude H. Sergievsky Center  
Richard Mayeux, M.D., M.Sc.

Herbert Irving Comprehensive  
Cancer Center  
Mitchell Benson, M.D.  
(acting director)

Herbert and Florence Irving  
Center for Clinical Research  
Henry N. Ginsberg, M.D.

Institute for Cancer Genetics  
Riccardo Dalla-Favera, M.D.

Institute of Comparative  
Medicine  
Thomas Martin, Ph.D. (July 1,  
2004)

Institute for Gene Research  
Maxwell Gottesman, M.D., Ph.D.

Institute of Human Nutrition  
Richard J. Deckelbaum, M.D.

International Center for Health  
Outcomes and Innovation  
Research  
Annetine Gelijns, Ph.D.

Joint Centers for Systems Biology  
T. Conrad Gilliam, Ph.D.  
(scientific director)  
Barry Honig, Ph.D.  
(scientific director)

Andrea Califano, Ph.D.  
(scientific and administrative  
director)

Kavli Institute for Brain Science  
Eric Kandel, M.D.

Morris W. Stroud III Center for  
Study of Quality of Life  
Barry Gurland, M.D.

Morton A. Kreitchman  
PET Center  
Ronald Van Heertum, M.D.

Naomi Berrie Diabetes Center  
Robin S. Goland, M.D.  
Rudolph L. Leibel, M.D.

New York Obesity Research  
Center (St. Luke's-Roosevelt)  
F. Xavier Pi-Sunyer, M.D., M.P.H.

Sackler Institute for  
Developmental Psychobiology  
Myron Hofer, M.D.

Taub Institute for Research on  
Alzheimer's Disease and the  
Aging Brain  
Richard Mayeux, M.D., M.Sc.  
Michael Shelanski, M.D., Ph.D.

### Departmental Centers and Directors

#### Anesthesiology

Pain Management Center  
Michael Weinberger, M.D.

#### Dermatology

Skin Diseases Research Center  
David R. Bickers, M.D.

#### Biomedical Informatics

New York State Center for  
Advanced Information  
Management  
Edward H. Shortliffe, M.D., Ph.D.

#### Medicine

Center for Women's Health  
Elsa-Grace V. Giardina, M.D.

Columbia Center for the  
Active Life of Minority Elders  
Rafael A. Lantigua, M.D.

Heart Failure Center  
Milton Packer, M.D.

Partnership for Gender-  
Specific Medicine  
Marianne J. Legato, M.D.

Toni Stabile  
Osteoporosis Center  
Ethel S. Siris, M.D.

#### Neurological Surgery

Cerebrovascular Center  
E. Sander Connolly Jr., M.D.

Center for Movement  
Disorder Surgery  
Blair Ford, M.D.  
Robert R. Goodman, M.D., Ph.D.

Neuro-oncology Center  
Jeffrey N. Bruce, M.D.

Pediatric Neurosurgery Center  
Neil A. Feldstein, M.D.

Spine Center  
Paul C. McCormick, M.D.

#### Neurology

Center for Parkinson's Disease  
and Related Disorders  
Stanley Fahn, M.D.

Comprehensive Epilepsy Center  
Martha J. Morrell, M.D.

Doris & Stanley Tananbaum  
Center for Cerebrovascular  
Diseases  
J.P. Mohr, M.D.

Dystonia Research Center  
Stanley Fahn, M.D.

Eleanor and Lou Gehrig  
MDA/ALS Research Center  
Hiroshi Mitsumoto, M.D.

Huntington's Disease Center  
Karen S. Marder, M.D.

H. Houston Merritt Center for  
Neuromuscular Disorders  
Salvatore DiMauro, M.D.

#### Obstetrics & Gynecology

Center for Endometriosis  
Nabil Husami, M.D.

Center for Menopause,  
Hormonal Disorders, and  
Women's Health  
Michelle Warren, M.D.

Center for Reproductive Sciences  
Mary E. D'Alton, M.D.

Center for Women's  
Minimal Access Surgery  
Jody Blanco, M.D.  
John Evanko, M.D.

Center for Prenatal Pediatrics  
Lynn Simpson, M.D.

Multiple Birth Center  
Mary E. D'Alton, M.D.  
Jane Cleary-Goldman, M.D.

Center for Women's  
Reproductive Care  
Mark Sauer, M.D.

Center for Pelvic Reconstruction  
Jody Blanco, M.D.

#### Orthopedic Surgery

Anne Youle Stein Center for  
Orthopedic Education and  
Research  
Louis U. Bigliani, M.D.

Center for Hip and Knee  
Replacement  
William B. Macaulay Jr., M.D.

Center for Orthopaedic Research  
Francis Y. Lee, M.D., Ph.D.  
Theodore A. Blaine, M.D.

Center for Shoulder, Elbow, and  
Sports Medicine  
Louis U. Bigliani, M.D.

Trauma Training Center  
Melvin P. Rosenwasser, M.D.

#### Otolaryngology/ Head & Neck Surgery

Voice and Swallowing Center  
Jonathan Aviv, M.D.  
Thomas Murry, Ph.D.

#### Pathology

Center for Advanced  
Laboratory Medicine  
Daniel Fink, M.D.

## Pediatrics

Child Advocacy Center  
Jocelyn Brown, M.D.

Children's Cardiovascular  
Health Center  
Richard Deckelbaum, M.D.  
Welton Gersony, M.D.

Children's Digestive  
Health Center  
Joseph Levy, M.D.

Children's Lung Center  
Michael Bye, M.D.

Cystic Fibrosis Center  
Lynne Quittell, M.D.

Cystic Fibrosis Referral  
Center for Susceptibility  
& Synergy Studies  
Lisa Saiman, M.D.

Pediatric Pulmonary  
Hypertension Center  
Robyn Barst, M.D.

Perinatal Emphasis  
Research Center  
Raymond Stark, M.D.

## Pharmacology

Center for Molecular  
Therapeutics  
Michael R. Rosen, M.D.

Physiology & Cellular  
Biophysics

Immunology Center  
Samuel C. Silverstein, M.D.

## Psychiatry

Carmel Hill Center  
Laurie Flynn

Center for the Advancement of  
Children's Mental Health  
Peter Jensen, M.D.

David Mahoney Center for  
Brain & Behavior Research  
Michael Goldberg, M.D.

Lieber Schizophrenia  
Research Center  
Timothy Walsh, M.D.

Ruane Center for Early  
Identification of Mood Disorders  
David Shaffer, M.D.

Stanley Foundation  
Bipolar Center  
John Mann, M.D.

## Radiation Oncology

Center for Radiosurgery  
Steven R. Isaacson, M.D.  
Michael Sisti, M.D.

## Radiology

Hatch Research Center  
Truman Brown, Ph.D. (director  
of magnetic resonance research)  
Robert DeLaPaz, M.D. (medical  
director)

Functional MRI Research Center  
Joy Hirsch, Ph.D.

Biomedical Engineering  
Imaging Center  
Andrew Laine, D.Sc.

## Rehabilitation Medicine

Programs in  
Occupational Therapy  
Janet Falk-Kessler, Ed.D.

Programs in Physical Therapy  
Risa Granick, Ed.D., PT

Richard and Hinda Rosenthal  
Center for Complementary &  
Alternative Medicine  
Fredri Kronenberg, Ph.D.

## Surgery

Arrhythmia Surgery Program  
Michael Argenziano, M.D.

Center for Extracorporeal  
Membrane Oxygenation  
Charles J.H. Stolar, M.D.

Center for Innovative Cancer  
Management  
Howard L. Kaufman, M.D.

Colorectal Care Center  
R. Lawrence Whelan, M.D.

Columbia Hyperhidrosis Center  
Lyall A. Gorenstein, M.D.

Comprehensive Breast Center  
Freya R. Schnabel, M.D.

Craniofacial Reconstruction  
Program  
Jeffrey A. Ascherman, M.D.

Integrative Medicine Program  
Mehmet C. Oz, M.D.

Jo-Ann F. LeBuhn  
Center for Chest Disease &  
Respiratory Failure  
Mark E. Ginsburg, M.D.

Mechanical Circulatory  
Support Program  
Yoshifumi Naka, M.D., Ph.D.

Melanoma Center  
Howard L. Kaufman, M.D.

Minimal Access  
Surgery Program  
Dennis Fowler, M.D.

New York Thyroid Center  
William B. Inabnet, M.D.

Obesity Management and  
Surgery Center  
Marc Bessler, M.D.

Pancreas Center  
John A. Chabot, M.D.

Pancreatic Islet Cell  
Transplantation Program  
Mark A. Hardy, M.D.

Pediatric Minimal Access  
Surgery Program  
Jeffrey Zitsman, M.D.

Pediatric Trauma Program  
Steven Stylianos, M.D.

## Plastic and Reconstructive Surgery

Robert T. Grant, M.D.

## Robotically Assisted Cardiac Surgery Program

Michael Argenziano, M.D.

## Transplant Center (liver, lung, heart)

Jean C. Emond, M.D.

## Transplant Program (renal)

Mark A. Hardy, M.D.

## Ulcer and Wound Healing Center

Nicholas Morrissey, M.D.

## Vascular Institute

K. Craig Kent, M.D.

## Vein Disorder Treatment Center

Roman Nowygrod, M.D.

## Women at Risk

Freya R. Schnabel, M.D.

## Urology

### Center for Holistic Urology

Aaron Katz, M.D.

### Male Reproductive Center

Harry Fisch, M.D.

### New York Center for Human Sexuality

Ridwan Shabsigh, M.D.

### Center for Bladder & Prostate Health

Steven Kaplan, M.D.

Kimberly Cooper, M.D.

### Stone Center

Mantu Gupta, M.D.

### Men's Health Initiative

Brian Stone, M.D.

## Affiliated Hospitals

### P&S affiliated hospitals:

New York-Presbyterian

Hospital, New York, NY

Arnot Ogden Medical Center,

Elmira, NY

Isabella Geriatric Center,

New York, NY

Harlem Hospital, New York, NY

Mary Imogene Bassett Hospital,

Cooperstown, NY

New York State Psychiatric

Institute, New York, NY

St. Luke's-Roosevelt Hospital

Center, New York, NY

### P&S/New York-

Presbyterian Hospital

affiliated hospitals:

Helen Hayes Hospital, West

Haverstraw, NY

Holy Name Hospital, Teaneck, NJ

Lawrence Hospital,

Bronxville, NY

New Milford Hospital,

New Milford, CT

New York College of Podiatric

Medicine and the Foot Clinics,

New York, NY

Nyack Hospital, Nyack, NY

Orange Regional Medical

Center, Middletown, NY

Palisades Hospital, Palisades, NJ

St. Luke's/Newburgh,

Newburgh, NY

St. Mary's Hospital for

Children, Bayside, NY

St. Vincent's Hospital,

Bridgeport, CT

Stamford Hospital, Stamford, CT

Valley Hospital, Ridgewood, NJ

White Plains Hospital Center,

White Plains, NY



A program of planned giving offered by the Columbia University Medical Center Development Office, Giving Well provides a range of choices for our donors, physicians, alumni, and friends who wish to make a gift to the medical center. Our experts can guide you through steps for each type of planned gift, preparing proposals, suggesting bequest language, helping to create trusts, and even showing how a gift can benefit the Medical Center while simultaneously providing you with tax savings and lifetime income.

For further information, please call: Randy Beranek, Senior Director of Development and Planned Giving, at 212 304-7200

Columbia University College of Physicians & Surgeons

Office of the Executive Vice President for Health and Biomedical Sciences  
630 West 168th Street  
New York, NY 10032

Office of Communications and External Relations  
630 West 168th Street, P&S Box 37  
New York, NY 10032  
Phone: 212 305-3900  
Fax: 212 305-4521

Office of Development  
630 W. 168th Street, P&S Box 48  
New York, NY 10032  
Phone: 212 342-0099  
Fax: 212 342-0098

P&S Alumni Association  
630 W. 168th Street, P&S Box 55  
New York, NY 10032  
Phone: 212 305-3498  
Fax: 212 305-8293

2003 Annual Report  
Design: George/Gerard Design, NYC  
Writing: Gina Shaw

Photography: Ed Eckstein, Eckstein Photography

Produced by the Office of Communications and External Relations at Columbia University Medical Center with assistance from the Development Office, the P&S Alumni Association, Archives and Special Collections, and the Office of Budget and Finance.

Online: [www.cumc.columbia.edu/dept/ps/annual/annualreport03.pdf](http://www.cumc.columbia.edu/dept/ps/annual/annualreport03.pdf)



COLUMBIA UNIVERSITY

*College of Physicians  
and Surgeons*

630 West 168th Street, Box 37  
New York, New York 10032

NON-PROFIT ORG.

US POSTAGE

**PAID**

NEW YORK, NY

PERMIT NO. 3593