



# This Is Duke Medicine

2005–2006 CHANCELLOR'S REPORT







“Ever since James B. Duke first dreamed of creating a new medical institution in the Carolinas, Duke has been driven by a spirit of innovation...”





**Our Mission:** As a world-class academic and health care system, Duke Medicine strives to transform medicine and health locally and globally through innovative scientific research, rapid translation of breakthrough discoveries, educating future clinical and scientific leaders, advocating and practicing evidence-based medicine to improve community health, and leading efforts to eliminate health inequalities.

# This Is Duke Medicine



Dear Friends,

July 2005 marked the beginning of a yearlong celebration of 75 years of medicine at Duke—and the start of a new and pivotal period in our history. Our anniversary year provided many opportunities to celebrate the noble goals that gave birth to this institution and our breathtaking progress over the decades, but it has proved to be a time of looking forward even more than of looking back.

Over the course of our anniversary year and ensuing months, we have generated important advances in patient care, notable scientific discoveries, forward-thinking academic programs, and bold new ideas and initiatives—including an institution-wide strategic plan that charts our course for the years to come.

What has truly set 2005–2006 apart, however, is not merely the extraordinary achievements, but the excitement of a new direction and shared purpose that has infused every part of our institution. Together we are redefining Duke Medicine for the next 75 years, building upon our traditional strengths in patient care, education, research, and service to create new synergies and fuel ambitious initiatives designed to transform medicine.

We are breaking down traditional walls between our schools and hospitals, researchers and clinicians, medical center and university, so that we can better leverage each other's strengths and work together as one. We are strengthening the continuum that links our five core endeavors here at Duke— inquiry, discovery, translation, adoption, and service—so that we may speed the translation of research breakthroughs and clinical advances into better health, both for the patients we serve and for society as a whole.

This powerful model of applied innovation will underlie what we have termed “signature initiatives”—major targeted efforts into which we will be channeling significant energy and resources in the years ahead. By developing better models for safety and quality of patient care, taking a leadership role in science and technology, creating a seamless continuum for rapid translation of research discoveries to improve the human condition, tackling the fundamental problems of global health disparities, and establishing a new medical school and research collaborations in Singapore, we will realize Duke Medicine’s potential to make a profound impact on the health of people in Durham, across North Carolina, and worldwide.

On behalf of all of us here at Duke Medicine, I am pleased to share with you this 2005–2006 report, which chronicles our progress over the past 18 months. The advances made possible through the combined efforts of our staff and generous supporters are truly inspiring. I hope you will be as proud as I am of the extraordinary work that has taken place to advance our longstanding missions of patient care, research, and education—and to achieve our vision of transforming medicine for the good of all.

A handwritten signature in black ink, appearing to read "V.J. Dzau".

Victor J. Dzau, MD

CHANCELLOR FOR HEALTH AFFAIRS, DUKE UNIVERSITY  
PRESIDENT AND CEO, DUKE UNIVERSITY HEALTH SYSTEM  
JAMES B. DUKE PROFESSOR OF MEDICINE

January 2007

# Care

## Modeling innovation and compassion

### **Patients are at the heart of everything we do at Duke**

**Medicine.** That's why we are orienting the entire institution to better meet the needs of the people we serve.

In 2005–2006, Duke Medicine made major strides toward ensuring a patient-centered culture—from establishing a patient advocacy council that brings the patient perspective directly to our most senior decision-makers, to designing new programs that hold each person across our health system accountable for meeting the highest customer service standards.

At the same time, we are capitalizing on Duke Medicine's strengths in education and research to pioneer new and better ways to treat disease and deliver health services. By applying advances in information technology to promote patient safety and evidence-based care, by creating more effective models of providing care—both within our institution and in the community—and by constantly translating research breakthroughs into improved treatments and preventive measures, we are leading the way towards better health for all.

- In 2005–2006 Duke cared for one of the greatest numbers of patients in our history, with some 60,000 inpatient discharges and an estimated 1.7 million outpatient visits.
- Duke rose to #7 in the nation in the 2006 *U.S. News & World Report* rankings of "America's Best Hospitals."
- In 2006 Duke University Hospital earned Magnet status from the American Nurses Association credentialing arm—a recognition of nursing excellence shared by only 3.7 percent of hospitals nationwide.

2005

JULY 2005

A new building boom. Giant grants landed. Anniversary celebrations and health care innovations. No doubt about it, 2005–2006 has been a great run—and a harbinger of great things ahead. **Following are highlights of the life and times of Duke Medicine over the past 18 months. >>**

**07.01.05:** To improve efficiency and better meet patient needs, Duke University Health System adopts a new administrative structure to integrate ambulatory and acute care management across the system.



## Putting patients first

A housekeeper at Durham Regional Hospital, Mamie Williams is part of a Duke Medicine team that has worked hard to take good care of patients. From 2005 to 2006, the hospital's Environmental Services team raised its patient satisfaction scores on some units from the 53rd to 95th percentile through such measures as patient questionnaires, a turndown service, and even presenting each patient with a fresh daisy to thank them for choosing Durham Regional. The efforts are part of DRH's Customer Service Initiative, just one of many programs Duke Medicine has created to put patients first. "Sometimes all people need is someone to listen to them and offer a friendly smile," Williams says. "That's what I try to do."



**07.10.05:** London bombing victims Emily and Katie Benton are flown to Duke for treatment by an expert team of trauma, orthopaedic, plastic, and reconstructive surgeons.



**07.14.05:** The National Institutes of Health awards a \$300-million grant to establish the Center for HIV/AIDS Vaccine Immunology (CHAVI), an international, multi-institution scientific consortium led by Duke's Barton Haynes, MD.



**07.20.05:** Hospitals & Health Networks magazine names Duke one of the nation's "Most Wired" hospitals and health systems for excellence in applying information technology to improve quality, customer service, public health and safety, business processes, and workforce issues.



**07.21.05:** Duke University Hospital marks the 75th anniversary of its opening, and begins a yearlong celebration of milestones.

## Staying connected



Patients cross the globe for the innovative care offered by Duke's Pediatric Blood and Marrow Transplant program. Now, they'll find it easier to stay connected to home. In January 2006 Bob Evanovsky of The Evanovsky Foundation in Illinois gave the program 18 laptop computers in gratitude for the care provided to his toddler, Jack (center), who received a lifesaving cord-blood transplant to correct a serious metabolic disease. In April 2006 The Evanovsky Foundation, along with The Trimper Children's Fund, The Stennis Foundation, and Athena's Hope Foundation, raised \$112,500 to support cell replacement therapy research by program director Joanne Kurtzberg, MD, who pioneered the use of umbilical cord blood to treat rare metabolic diseases.

CARE

8

2005



**07.28.05:** Durham developer Gary M. Hock gives \$1.5 million to establish the Gary M. Hock Distinguished University Professorship in Global Health. In May 2006 G. Ralph Corey, MD, director of the Hubert-Yeargan Center for Global Health, receives the professorship.



AUGUST 2005

**08.30.05:** The Edna and Fred L. Mandel Jr. Foundation makes a commitment of over \$2.5 million to establish the Mandel Center for Hypertension and Atherosclerosis Research at Duke.



SEPTEMBER 2005

**09.29.05:** As part of its Effective Health Care Program, the federal Agency for Healthcare Research and Quality selects Duke as one of 13 centers nationwide to conduct research studies to promote better patient outcomes.



## A statewide RACE to save lives

For heart attack victims, emergency treatment with angioplasty or clot-busting drugs can be lifesaving. But in North Carolina, only 60 percent of eligible patients receive such reperfusion therapies—and too often treatment is delayed. In November 2005 a Duke-led network of physicians, hospitals, and emergency medical service providers across the state launched a new project to improve heart attack survival rates through better care coordination and caregiver education. Dubbed RACE (Reperfusion of Acute MI in Carolina Emergency departments) and supported by a \$1-million grant from Blue Cross and Blue Shield of North Carolina, the project serves as a national model for improving emergency care delivery.



## Compassion from beginning to end

“It really was a beautiful experience. And it wouldn’t have been that way without the exceptional care at Duke.”

—Sharon Campen, pictured at Duke’s bereavement center in Hillsborough, N.C.

When Sharon Campen’s husband was diagnosed with advanced colorectal cancer at age 37, treatment options were limited—but the care the couple received through Duke HomeCare & Hospice was boundless. “Despite the hardships, it really was a beautiful experience,” says Campen. “And it wouldn’t have been that way without the exceptional care at Duke.” Campen is one of 5,700 individuals served each year by DHCH, part of Duke Medicine’s expanding array of community-based programs designed to meet the health needs of people throughout North Carolina and beyond.

OCTOBER 2005



**10.03.05:** The School of Medicine holds its 75th anniversary convocation, celebrating the school's rapid progress, innovative curriculum, and significant individuals throughout its history.



**10.10.05:** Duke Comprehensive Cancer Center receives a \$35.7-million, five-year renewal of its Cancer Center Support (Core) Grant by the National Cancer Institute (NCI). The prestigious grant continues Duke's status as an NCI-designated comprehensive cancer center, a recognition Duke has held since 1973.



**10.10.05:** Duke immunologists report their discovery that a new monoclonal antibody immune therapy holds considerable promise for treating leukemia, autoimmune diseases, and transplant rejection.



**10.13.05:** NIH funds a \$22-million anti-terrorism center at Duke. Led by Nelson Chao, MD, it develops novel biodosimetry, drugs, and therapies to reduce radiation injury after a terrorist attack with a “dirty bomb” or nuclear device.



**10.19.05:** The Preston Robert Tisch family donates \$10 million for brain tumor and cancer research at Duke, the single largest gift ever received by the Duke Comprehensive Cancer Center.



DECEMBER 2005

**12.28.05:** The Kate B. Reynolds Charitable Trust pledges over \$340,000 to the Department of Community and Family Medicine to provide prenatal care, mental health services, and education on sexually transmitted diseases to Durham high school students.



2006

JANUARY 2006

**01.06:** Duke Medicine's executive leadership team includes more women and minorities than ever before, including its nursing school dean, chief of staff (through May 2006), chief strategic planning officer, chief patient safety officer, vice president for government and community affairs and external relations, and associate vice president for community relations.



**01.06:** The School of Nursing establishes a new Office of Global and Community Health Initiatives, directed by Dorothy Powell, EdD, RN.

## Preparing leaders who will move medicine forward

**As an academic medical institution, Duke Medicine embraces a vital responsibility**—training the next generation of health care leaders. With medicine evolving at the speed of thought, our goal is to prepare physicians, scientists, nurses, and other health care professionals who not only perform their roles with skill and compassion, but have the vision and creativity to lead the way in advancing scientific knowledge and human health.

Even as our medical and nursing schools celebrated their 75th anniversaries (in October 2005 and January 2006 respectively), they were laying the groundwork to meet those future challenges. The School of Nursing opened both its new \$18-million building and a doctoral program in 2006, paving the way for future expansion and continued ascent into the uppermost ranks of nursing schools. It also created an Office of Global and Community Health Initiatives to improve care for vulnerable populations, and continued to strengthen its research programs.

The School of Medicine positioned itself at the forefront of the globalization of medical education during 2006, taking a leading role in establishing the Duke Global Health Institute and in developing the Duke-National University of Singapore Graduate Medical School (see pp. 24 and 13). The medical school also announced strategic plans to guide its progress over the next decade, including new initiatives to attract the best scholars and faculty, promote Duke's strengths in discovery biology, translational medicine, and health disparities research, and create state-of-the-art facilities to support medical research and education.

At the same time, the school carried on its tradition of excellence in medical education, with its innovative curriculum, exceptionally strong dual-degree offerings, national leadership in diversity, and excellent placement of students in leading residency programs—including Duke's own—attracting more than 5,200 applications for 101 slots in the 2006 entering class.

Strategic plan summaries for both schools are online at [dukemedicine.org/vision](http://dukemedicine.org/vision).

- In 2006, *U.S. News & World Report* ranked Duke's School of Medicine among the top six programs in the nation, with residency program directors ranking Duke among the top three.

- *U.S. News* has also ranked Duke's School of Nursing among the top 29 U.S. nursing schools—with its master's programs in anesthesia and gerontology ranked #6 and #8 respectively.

- *U.S. News* ranks Duke's Physician Assistant program #1 in the nation.



## Supporting our students

Educating the next generation of physicians and nurses has never been more expensive. To continue attracting the highest-caliber students, Duke University in December 2005 launched a \$300-million financial aid campaign to endow its financial aid programs, with the goal of raising \$12 million for medical students and \$4 million for nursing students through 2008. "Both the excellent training and the financial support from Duke have opened up a world of opportunity for me," says student Sulene L. Chi, who will earn an MD in addition to her PhD in pathology through Duke's prestigious Medical Scientist Training Program. "I look forward to contributing similarly to research, to my patients, and to Duke."



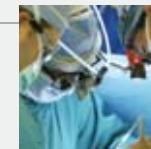
**01.09.06:** Joining Duke University Hospital, Durham Regional Hospital launches an intensivist program in which specially trained physicians provide seven-day-a-week coverage in hospital intensive care units, improving quality and safety.



**01.17.06:** The Duke University School of Nursing kicks off its 75th anniversary celebration, while looking forward to its first class of PhD students and the completion of a new building in 2006.



**01.25.06:** Leaders from Duke Medicine and Peking University Health Sciences Center sign a letter of intent to explore working together to improve health care management and cardiovascular medical education, research, and care.



**01.26.06:** John Laurino of Wilmington, North Carolina, provides a total of **\$4.5 million in annuities and estate gifts** to benefit breast cancer research, surgical residency training, ophthalmology, and radiation oncology at Duke.



FEBRUARY 2006



**02.07.06:** With a \$1.65-million grant from the GlaxoSmithKline Foundation, Duke and UNC launch a partnership to address pressing public health concerns, including quality of care and patient safety, health disparities, and global health, with an emphasis on HIV/AIDS and mental-health care.



## A new kind of

### Duke nurse

For Rebecca Kitzmiller, deciding to become one of Duke's first PhD nursing students was a natural choice. "I want to find a better way to put technology to use at the bedside, and I felt I had gone as far as my skills and education could take me," says Kitzmiller. "Pursuing a PhD in nursing will help me help others by learning and putting that knowledge back into the operational environment to improve the quality of care." Launched in fall 2006, the doctoral program aims to prepare nurse-scientists who can find solutions to the complex challenges of delivering care to the chronically ill. By producing nurses qualified for careers in academia, it will also address a critical shortage of nursing faculty nationwide.

"At Duke, we believe that the partnership between the educational programs and the care delivery systems are fundamental to the enrichment of each and, ultimately, to providing the best patient care." —Dean Catherine L. Gilliss, DNSc, RN



**02.13.06:** Duke and its partners in the Center for Child and Family Health—North Carolina announce a yearlong project to help child victims of domestic violence who are living in shelters. The project is funded by \$200,000 from The Duke Endowment and \$100,000 from the Z. Smith Reynolds Foundation.



**02.14–16.06:** The MIX 101.5 Radiothon for Duke Children's Hospital rings up a record—with donations nearing \$930,000 for children's care and research at Duke.

“Together, we will give birth to fresh ideas, distinctive programs, and productive partnerships, and strive relentlessly to produce value for Singapore, for Duke, and for humankind.” —Dean R. Sanders Williams, MD

## Singapore partnership

One of Duke's most ambitious undertakings leapt forward in 2005–2006, as our partnership with the National University of Singapore to create a new medical school blossomed from a bold idea to an exciting reality. Following the official sealing of the partnership in April 2005, R. Sanders Williams, MD,

was appointed dean, ground was broken for the school's permanent facilities, and recruitment of faculty and students began. Based on Duke's innovative medical curriculum that

devotes a full year to independent research and backed by the investment of the Singapore government, the Duke-NUS Graduate Medical School Singapore, offering a joint degree from Duke and NUS, will admit its first class in 2007.



MARCH 2006

**02.16.06:** Improving care for Durham heart patients, Duke opens a new intermediate cardiac care unit at Durham Regional Hospital.



**03.06.06:** A team of researchers reports the discovery of a link between a gene variant, smoking, and increased risk of age-related macular degeneration, the most common cause of visual impairment and legal blindness in older Americans.

MARCH 2006



**03.31.06:** U.S. News & World Report's annual "Best Graduate Schools" edition ranks Duke University School of Medicine #6 among medical schools nationwide.

APRIL 2006

**04.08–09.06:** Students at Elon University in North Carolina raise \$120,000 for Duke Children's Hospital at the 2006 Elonthon dance marathon; 814 dancers and volunteers participate.



# Discovery

## Translating research breakthroughs into better health

**One could almost hear Duke Medicine's research engine revving up** during 2005 and 2006. Not only did the medical center earn its greatest amount of research dollars in history during the fiscal year—including the largest-ever single grant, \$300 million in NIH funding over seven years to lead an international AIDS vaccine research consortium—we announced major new initiatives designed to accelerate the pace of scientific discovery and its impact on human health.

Key among them are the October 2006 establishment of the Duke Translational Medicine Institute, which aims to be the nation's leading home for investigators applying new discoveries to improve medical care and community health, and a historic \$280-million transfer of funds from the health system to provide

increased financial stability for Duke Medicine's educational and research missions in a time of stagnant federal funding and market uncertainties.

2005–2006 also saw a dramatic expansion of research space—a key to attracting top scientists—with the opening of the 165,000-square-foot Medical Science Research Building II and the Global Health Research Building.

Meanwhile, Duke Medicine investigators continued to prove the power of such investments in science, generating a host of notable discoveries through the year. Their accomplishments ranged from basic-science breakthroughs to clinically applicable advances—including new strategies to fight heart disease, cancer, and other pressing health problems.

- Duke Medicine is one of the largest biomedical research enterprises in the country, with more than \$500 million in sponsored research annually.
- Duke ranks among the top five American medical schools in NIH grant funding, with its research funding growing by 14.8 percent between fiscal years 2004 and 2005—the highest rate of growth among the nation's 20 top-ranked institutions.
- Duke's School of Nursing ranked #19 among nursing schools in NIH funding for fiscal year 2005, rising from #23 the previous year.

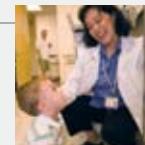
**04.10.06:** Duke opens a \$6-million ultra-sterile, completely sealed fertility center. Designed to prevent airborne toxins and pathogens from interfering with the in vitro fertilization process, the center is the first of its kind in North Carolina.



**04.17–18.06:** Duke's Global Health Institute is officially launched during a two-day Global Health Symposium, featuring international global health experts and highlighting Duke's ongoing efforts to address global health and health disparities.



**04.23–24.06:** Prominent national, state, and local leaders convene to discuss statewide health care gaps as Duke hosts the North Carolina Summit on Health Disparities.



**04.28.06:** The Food and Drug Administration approves Myozyme—the first treatment for Pompe disease, a rare genetic disorder that was previously fatal in newborns. The lifesaving treatment was discovered by Y.T. Chen, MD, PhD, and his team at Duke.





"You always hope for a day when there is an answer.  
To see that day come has been extraordinary."

—Pompe team caregiver Laura Case, DPT

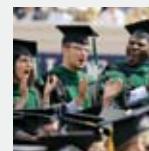
## A lifesaving treatment

In April 2006 the FDA approved Myozyme, the first treatment for Pompe disease—a genetic disorder that once killed every baby it touched. Discovered by Duke's Y.T. Chen, MD, PhD, and developed over 15 years by a team of researchers at Duke and Genzyme, Myozyme now makes it possible for children like Ryan Clark to live normal lives. Ryan and his mother are shown above at celebratory reunion of Pompe patients, caregivers, and researchers held at Duke in August.

MAY 2006



**05.06.06:** The new Southeastern Regional Heart Center opens in Lumberton. Located at Southeastern Regional Medical Center, managed by Duke University Health System, and staffed by Duke heart specialists, it brings new levels of care to the communities of southern North Carolina.



**05.14.06:** Duke graduates 108 new MDs (21 of whom also earned a second advanced degree), 32 doctors of physical therapy, 60 students with the master of science in nursing degree, 54 with the bachelor of science in nursing, 47 with master of health sciences (MHS), 22 with MHS in clinical research, 5 with MHS in clinical leadership, 41 new physician assistants, and 6 new pathology assistants.



**05.17.06:** An international team of scientists led by Duke's Simon Gregory, PhD, announces the completion of genetic mapping of human chromosome 1, offering insights into human health.

"We must capitalize on Duke's inherent ability to think up new ideas and translate them into treatments and services that will improve people's lives."

—Chancellor Victor J. Dzau, MD

Twenty-five years after the first AIDS diagnosis, a vaccine remains elusive—but more critical than ever to stem the global pandemic. Duke's Barton Haynes, MD, is leading a worldwide network of scientists in one of the most ambitious offensives ever mounted against the disease as the director of the Center for HIV/AIDS Vaccine Immunology (CHAVI). Established in July 2005 by a \$300-million NIH grant, CHAVI is also part of the Global HIV Vaccine Enterprise, a partnership of the NIH and the Bill & Melinda Gates Foundation, which in 2006 awarded Haynes and David Montefiori, PhD, grants totaling \$46.5 million for HIV vaccine development. The total funding places Duke at the forefront of international efforts to develop an HIV vaccine—and solve the AIDS puzzle at last.

DISCOVERY

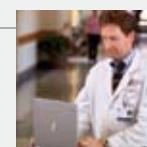
16

2005      2006

JUNE 2006



**06.06:** As part of its efforts to increase offerings in Wake County—the fastest-growing county in North Carolina—Duke expands services at the new Duke Medicine at Brier Creek location to include gastroenterology services as well as a family medicine practice.



**06.20.06:** Computerized Physician Order Entry (CPOE) goes live at Durham Regional Hospital, improving patient safety by enabling physicians to order clinical services, tests, and medications electronically. CPOE began at Duke University Hospital in 2004.



**06.20.06:** The Duke-based Center for HIV/AIDS Vaccine Immunology (CHAVI) announces the creation of an international consortium to identify genetic differences in individuals' response to HIV. Led by Duke scientists, the EuroCHAVI consortium will facilitate collaboration between U.S., European, and Australian researchers.

## A bold approach





## Seeds of change

For patients with brain tumors, Duke is a mecca of hope, known for its bold experimental approaches and excellent record of success. Thanks to a \$10-million gift from the Tisch family in October 2005—the largest ever given to Duke's cancer center—the newly renamed Preston Robert Tisch Brain Tumor Center at Duke is even better positioned to change the course of these deadly cancers. In addition to \$5 million to support brain tumor research, the gift includes \$5 million to the broader medical center to establish the Tisch Cancer Investigators Fund, which will allow Duke to attract promising young investigators in brain stem cell and other research fields. Pictured at left is Hai Yan, MD, PhD, who is developing novel genetic therapies for childhood brain tumors.



## Science's next great idea

Chancellor Victor J. Dzau, MD, Thomas Steitz, PhD, of Yale University, and Nobel laureates Paul Nurse, PhD, and Peter Agre, MD (left to right), were among the big-name scientists who gathered at Duke's 75th

Anniversary Science Symposium in September 2006 to discuss "Science's Next Great Idea." Agre, who shared the 2003 Nobel Prize in Chemistry for revealing the molecular basis for the movement of water into and out of cells, joined Duke Medicine in July 2005 as vice chancellor for science and technology.

JULY 2006

**06.21.06:** The Zeist Foundation, established by the late Jean and George W. Brumley Jr., MD, donates \$5 million to establish professorships in developmental biology and support research at the Duke Neonatal-Perinatal Research Institute.



**06.26.06:** With approval from the North Carolina State Government, construction on a \$70.5-million addition and renovation project at Duke University Hospital begins.



**07.06:** The Duke Medicine Strategic Plan is introduced, conceptually integrating the research, clinical care, and education roles of Duke into a shared set of overarching goals and aspirations.



**07.01.06:** Peter Agre, MD, Nobel laureate and vice chancellor for science and technology at Duke, becomes director of Duke's **Medical Scientist Training Program (MSTP)**. Funded by the NIH, Duke's MSTP is designed to prepare highly qualified students for careers as physician-scientists.

# Service

Partnering with local and global communities to **improve health**

**Since its founding, Duke Medicine has been expressly committed to meeting the health needs of the poor and underserved throughout the Carolinas.** Today, we've expanded our scope dramatically, with dozens of global partnerships aimed at improving health not only in our backyard but around the world.

With the launch of the Global Health Institute in April 2006 (page 24), we are uniting research and service efforts across the university to bring new focus and power to those partnerships. By seeking medical solutions to global scourges such as AIDS, tuberculosis, and malaria, developing innovative models for improving access to care, and continuously putting these research-driven advances into practice through wide-ranging service efforts, Duke and its partners aim to maximize our impact on global health.

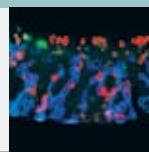
Our efforts include work not only in far-flung locales such as Tanzania and Kenya, but right here at home. In April 2006 Duke Medicine hosted some 600 health care and government leaders at a summit convened to bring new attention to the issues of health disparities in North Carolina. We also continued to work with community partners in ongoing projects to improve health care in our hometown. Among them are Just for Us, providing in-home care for 325 low-income seniors; two neighborhood clinics serving 7,800 low-income Durham residents; and four clinics in Durham schools. We also offer Local Access To Coordinated Healthcare (LATCH), providing bilingual patient support and advocacy for 8,600 uninsured residents; and the Durham Community Health Network, serving 17,600 Durham Medicaid enrollees.

■ In fiscal year 2006, Duke University Health System provided charity medical care to low-income patients at a cost of \$40.4 million, plus \$6.8 million in in-kind service contributions and direct support payments to Lincoln Community Health Center and Emergency Medical Services in Durham County.

■ Duke Medicine outreach programs extend to some three dozen countries worldwide.



**07.17.06:** Duke rises in ranking to #7 on U.S. News & World Report's Honor Roll of America's Best Hospitals.



**07.19.06:** As part of its \$287-million Collaboration for AIDS Vaccine Discovery, the Bill & Melinda Gates Foundation awards Duke two grants totaling \$46.5 million to further international collaborations to accelerate HIV vaccine development.



**07.22.06:** Duke scientists discover a key to growing new stem cells, which may lead to therapeutic transplants for patients with blood disorders, immune defects, and some genetic diseases.

**07.31.06:** Duke introduces Ambulatory Electronic Medical Records (AEMR) in General Pediatrics clinics. Designed to improve patient safety, patient satisfaction, and continuity of care between inpatient and outpatient settings, AEMR will also help Duke see trends across large outpatient populations and use that information to improve care quality system-wide.

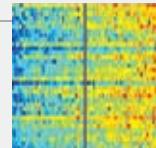


## Worldwide reach

At the Kilimanjaro Christian Medical Centre in Moshi, Tanzania, Duke faculty, residents, and students work alongside local partners to improve care for Tanzanians suffering from HIV, tuberculosis, and other infectious diseases. With a full-time Duke faculty presence, a well-established resident exchange program, and over a dozen ongoing studies conducted in collaboration with Tanzanian researchers, the Duke-Tanzania relationship is both inspiration for and an integral part of the new university-wide Global Health Institute.

AUGUST 2006

**08.06:** The School of Nursing opens its new \$18-million building, designed to accommodate its rapidly expanding research and education programs.



**08.09.06:** Duke Institute for Genome Sciences & Policy researchers report the development of the Lung Metagene Predictor, the first genomic test to predict which lung cancer patients need chemotherapy to live.



**08.09.06:** Duke researchers announce development of an experimental RNA-based drug—the first of its kind—that can effectively and safely kill prostate cancer cells.



**08.17.06:** Duke researchers add to the arsenal against dangerous staph infections with daptomycin, a new treatment for bloodstream and heart infections that resist other antibiotics.



## Engaging everyone

In honor of the medical school's 75th anniversary, Duke medical students performed 7,500 hours of community service during the 2005–2006 academic year—beginning with sprucing up a Durham charter school during medical school orientation, which devotes a full day to volunteerism. Says student Elizabeth Reese, "It's important to learn to serve people not only in a medical setting but out in the community."

SERVICE

20

2005 2006



**08.23.06:** A new dual-degree program in medicine and library science offered jointly by Duke and UNC begins with the start of the fall term. It is the first program of its kind in the nation.



SEPTEMBER 2006

**09.06:** The 165,000-square-foot Medical Science Research Building II opens. An environmentally friendly "green" building, it uses 26 percent less energy than conventional lab facilities.



**09.01.06:** Duke and the National University of Singapore celebrate the groundbreaking for a permanent facility for the new Duke-NUS Graduate Medical School Singapore, a collaboration between the two institutions to educate future physicians and promote biomedical research.



**09.01.06:** The Duke School of Medicine rises to #5 in NIH funding among American medical schools and posts a 14.8 percent increase over the previous year—the largest percentage increase of the top 20 medical schools.



## After Katrina

Duke caregivers shared their hearts and skills with Katrina victims after the devastating hurricane of August 2005. As part of the response efforts, a specially trained Duke State Medical Assistance Team (SMAT) joined similar teams from across North Carolina to set up a 100-bed field hospital in a K-Mart parking lot in Mississippi, where they treated an average of 250 patients a day over eight weeks. It was the first deployment for the SMAT, a regional team of volunteers from Duke and other member hospitals and EMS agencies managed by Duke's Trauma Center on behalf of the state.

## Better care in our backyard

Thaddeus Gilchrist credits Ok Chon Allison, PhD, with saving his life. The Duke nurse practitioner found Gilchrist in a diabetic coma when she arrived for her scheduled house call—and was able to get him emergency help as well as the long-term follow-up care he needed. It's just one of the many success stories of "Just for Us," a partnership between Duke and Durham community agencies that provides preventive care, primary care, and chronic disease management for low-income seniors and disabled adults in their homes.

**"Serving our community is part of the fabric of who we are."**

—Health System vice president and Duke University Hospital CEO William J. Fulkerson, MD



**09.15.06:** Following a three-year application and evaluation process, Duke University Hospital is named a "Magnet Hospital" by the American Nurses Association credentialing arm—a designation earned by only 3.7 percent of the nation's hospitals.



**09.25–26.06:** Nearly 1,000 scientists and students gather at Duke for the 75th Anniversary Science Symposium, featuring speeches by 13 of the country's leading researchers (including three Nobel laureates).



**09.26.06:** Duke Medicine announces a transfer of \$280 million from health system reserves to support research and education at Duke's schools of medicine and nursing. The health system typically provides \$20–\$30 million annually for academics; this larger transfer will facilitate long-term planning and provide investment income. It is the largest single transfer ever made from an academic health system to its affiliated educational and research programs.

# Ambition

## Applying our strengths to **transform medicine** at home and worldwide

**How can we make a great institution even better?** That question was on everyone's mind during 2005–2006, as Duke Medicine leaders, faculty, and staff worked together to envision our future and set forth the steps we will take to reach our ultimate goal—transforming medicine for the benefit of society.

The result is a bold vision, outlined in the Duke Medicine strategic plan of 2006. Drawing on the strengths of our health system and academic programs, we seek to weave Duke Medicine together in a new model of interdependence. We aim to create a seamless continuum between the scientific inquiry and discovery carried out in our medical and nursing schools, the care delivered through our health system, and the broad outreach that measurably impacts the health of our local and global communities.

That transformation has already begun, with the creation of new Duke Medicine-wide initiatives that cross all boundaries and bring the clinical and academic enterprises together in new ways. Among these are two of the most ambitious initiatives in our history, the Duke Global Health Institute and Duke Translational Medicine Institute.

Through such efforts, Duke Medicine will lead the way in advancing medical education, research, and care—ultimately harnessing the knowledge we create here to make a lasting difference in the health of people everywhere.

- For more information on the Duke Medicine strategic plan, visit [dukemedicine.org/vision](http://dukemedicine.org/vision).

**10.01.06:** Duke School of Nursing receives a five-year, \$1.43-million grant from the federal Health Resources and Services Administration to train nursing faculty from across the nation in using the latest technology to improve education and clinical practice.



**10.03.06:** Duke joins other area hospitals in a pledge to make their campuses 100-percent tobacco-free by July 4, 2007.



**10.03.06:** The Duke Translational Medicine Institute is launched with a \$52.7-million NIH grant. Led by Robert Califf, MD, vice chancellor for clinical research, the institute will accelerate the development of new therapies.



## New directions

Chancellor for Health Affairs Victor J. Dzau, MD (center), School of Nursing Dean Catherine Gilliss, DNSc, RN, and School of Medicine Dean R. Sanders Williams, MD, are among the leaders charting the course for the next 75 years of medicine at Duke.



**10.05.06:** Six Duke nurses are named to the "Great 100 Nurses" list. The statewide award honors North Carolina nurses for demonstrating excellence and commitment to their profession.



**10.11.06:** Duke Raleigh Hospital becomes the first hospital in the state to receive the Hallmarks of Healthy Workplace designation by the North Carolina Nurses Association Professional Practice Advocacy Coalition. Durham Regional's Davis Ambulatory Surgery Center also receives the honor, which recognizes excellence in nurse work environments.



**10.18.06:** Duke researchers show for the first time that cancer stem cells can help malignant tumors resist radiation treatment, and identify a possible way to block the process—a finding that could lead to new therapies to overcome radiation resistance in brain and other cancers.



**10.21.06:** Part of the Duke Medicine family since 1998, Durham Regional Hospital celebrates its 30th anniversary, marking three decades of compassionate care, excellence, and service in the community.



## Global perspectives

Paul Farmer, MD, a Duke alumnus and noted humanitarian who has devoted his life to improving health care in desperately poor areas of Haiti and Rwanda, was among the international experts in global health who gathered at Duke in April 2006 for the official launch of the Duke Global Health Institute. Uniting the efforts of medical, nursing, law, public policy, and other schools across campus, and backed by an initial \$30-million commitment from Duke, the Institute seeks to channel Duke's strengths toward reducing health disparities locally and worldwide. Michael Merson, MD, became the Institute's first director in November 2006.



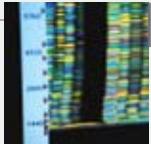
## Transforming health through translational research

After two years of planning, the Duke Translational Medicine Institute (DTMI) was born in October 2006, facilitated by a \$52.7-million grant from the NIH and a comparable commitment from Duke Medicine and private funds. Part of a national consortium that NIH director Elias Zerhouni describes as "the first systematic change in our approach to clinical research in 50 years," the DTMI, led by Robert Califf, MD (center), is designed to speed the translation of laboratory research discoveries into effective interventions to prevent and treat disease.

AMBITION

24

2005 2006



**10.22.06:** Duke Institute for Genome Sciences & Policy scientists develop a panel of genomic tests designed to guide chemotherapy choices for cancer patients.

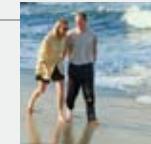


**10.28.06:** The Duke Immune Deficiency Foundation (IDF) Center of Excellence for Primary Immunodeficiency Diseases is dedicated. Directed by Rebecca Buckley, MD, and with grant funding from IDF through a generous gift from Talecris Biotherapeutics, it will improve diagnosis, treatment, and care for patients with primary immunodeficiency diseases.



NOVEMBER 2006

**11.06:** The Hubert Trust donates \$5 million to the Hubert-Yeargan Center for Global Health to expand research, service, and educational opportunities in global health for students and health care professionals at Duke and neighboring colleges and universities.



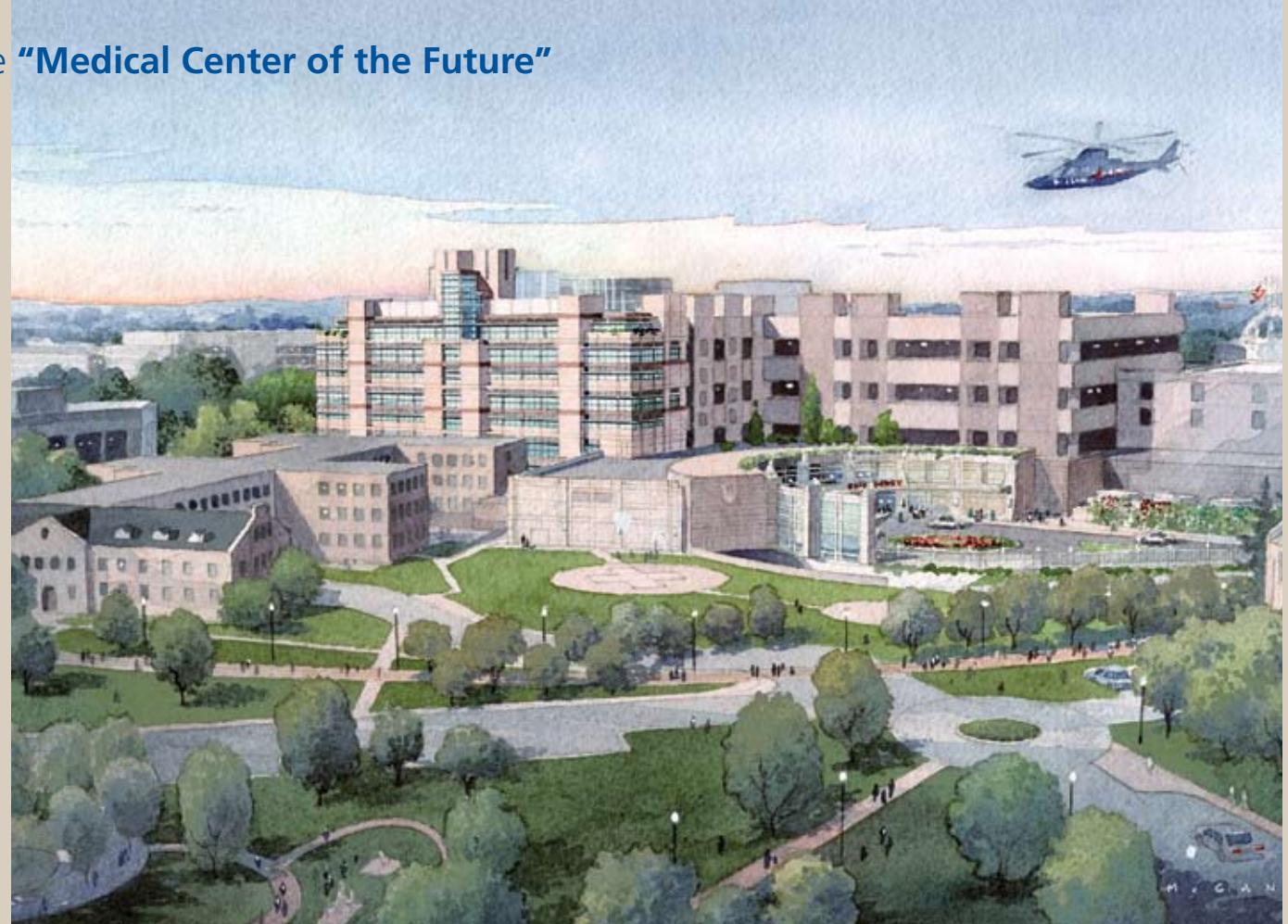
**11.06:** Duke and Florida's Indian River Medical Center collaborate to open the Heart Center of Vero Beach, offering both open-heart surgery and interventional cardiology. The effort is one of a growing number of Duke affiliations designed to extend top-quality care to patients in communities across the Southeast.

## Building the “Medical Center of the Future”

The Duke Medicine Strategic Plan, announced in 2006, laid the groundwork for big ideas that will position Duke for success in the decade ahead—including a master facility plan to develop the “medical center of the future” that calls for a major expansion of facilities on the Duke Medicine campus in Durham. The plan will also increase our ambulatory care capacity at other sites in Durham and Wake counties to meet the needs of the region’s growing population.

“...Together we can make great strides in transforming medicine into something even better than exists today.”

—Chancellor Victor J. Dzau, MD



DECEMBER 2006

**11.30.06:** The \$11-million Duke Integrative Medicine facility, funded by the Christy and John Mack Foundation, is dedicated. Directed by Tracy Gaudet, MD, Duke Integrative Medicine unites complementary and conventional therapies to provide “whole-person care.”



**12.08.06:** The Duke Endowment provides the second installment of a grant totaling more than \$6.3 million to support 14 Duke Medicine programs, including the Duke Signature Programs Initiative, the Duke Medicine Scholars Program, and the Duke Medicine Distinguished Scientist Program.



**12.13.06:** Duke announces the establishment of a new Institute for Brain, Mind, Genes, and Behavior. The multidisciplinary institute will not only advance scientific understanding of the human mind, but provide insight into societal problems and help patients with a variety of disorders and diseases.

For more information and the latest news from Duke, visit [dukemednews.org](http://dukemednews.org).

## Duke Medicine Administration

### **Victor J. Dzau, MD**

Chancellor for Health Affairs, Duke University President and CEO, Duke University Health System

### **Catherine Lynch Gilliss, DNSc, RN**

Dean, School of Nursing  
Vice Chancellor for Nursing Affairs, Duke University

### **R. Sanders Williams, MD**

Dean, School of Medicine  
Dean, Duke-NUS Graduate Medical School Singapore  
Vice Chancellor for Academic Affairs, Duke University

---

### **Peter C. Agre, MD**

Vice Chancellor for Science and Technology, Duke University

### **Asif Ahmad**

Vice President for Diagnostic Services and Chief Information Officer, Duke University Health System

### **Monte D. Brown, MD**

Vice President for Administration, Duke University Health System

### **Robert M. Califf, MD**

Vice Chancellor for Clinical Research, Duke University

### **Michael Cuffe, MD**

Vice President for Medical Affairs, Duke University Health System



### **Mary Ann Fuchs, RN**

Chief Nursing and Patient Care Services Officer, Duke University Hospital and Duke University Health System

### **William J. Fulkerson Jr., MD**

CEO, Duke University Hospital  
Vice President for Acute Care, Duke University Health System

### **David P. McQuaid**

CEO, Durham Regional Hospital

### **Kenneth C. Morris**

Senior Vice President, Chief Financial Officer, and Treasurer, Duke University Health System

### **Michael J. Morsberger**

Vice President, Duke Medicine Development and Alumni Affairs

### **Paul Newman**

Vice President for Ambulatory Care, Duke University Health System

### **Molly K. O'Neill**

Vice Chancellor for Medical Center Integrated Planning, Duke University;  
Vice President for Business Development and Chief Strategic Planning Officer, Duke University Health System

### **Gwynn T. Swinson, JD**

Vice President for Government and Community Affairs and External Relations, Duke University Health System

### **Robert L. Taber, PhD**

Vice Chancellor for Corporate and Venture Development, Duke University

### **Douglas B. Vinsel**

CEO, Duke Raleigh Hospital

### **Huntington F. Willard, PhD**

Vice Chancellor for Genome Sciences, Duke University

### **Gordon D. Williams**

Executive Vice Dean and COO, School of Medicine  
Vice Chancellor for Operations, Duke University

## Department Chairs

### Anesthesiology

### **Mark Newman, MD**

### Biochemistry

### **Peter C. Agre, MD** (interim chair)

### Biostatistics and Bioinformatics

### **Stephen George, PhD, Thomas Kepler, PhD, and Ross McKinney Jr., MD**

(interim co-chairs)

### Cell Biology

### **Brigid Hogan, PhD**

### Community and Family Medicine

### **J. Lloyd Michener, MD**

### Immunology

### **Thomas F. Tedder, PhD**

### Medicine

### **Harvey Jay Cohen, MD** (interim chair)

### Molecular Genetics and Microbiology

### **Thomas D. Petes, PhD**

### Neurobiology

### **James McNamara, MD**

### Obstetrics and Gynecology

### **Haywood Brown, MD**

### Ophthalmology

### **David L. Epstein, MD**

### Pathology

### **Salvatore Pizzo, MD, PhD**

### Pediatrics

### **Joseph St. Geme III, MD**

### Pharmacology and Cancer Biology

### **Anthony R. Means, PhD**

### Psychiatry

### **Ranga R. Krishnan, MB, ChB**

### Radiation Oncology

### **Christopher Willett, MD**

### Radiology

### **Carl E. Ravin, MD**

### Surgery

### **Danny O. Jacobs, MD**

## Duke University Health System Board of Directors

Ernest Mario, Chair

Thomas M. Gorrie, Vice Chair

Daniel T. Blue Jr.

Richard H. Brodhead, PhD

Harvey Jay Cohen, MD

Eugene F. Dauchert Jr.

Victor J. Dzau, MD

Frank E. Emory Jr.

James F. Goodman

Danny O. Jacobs, MD

Kimberly J. Jenkins

Rebecca Trent Kirkland, MD

John H. McArthur

Ralph C. Moore

Uwe E. Reinhardt

Robert King Steel

Peter Van Etten

Karl M. von der Heyden

R. Sanders Williams, MD

## Duke University Medical Center Board of Visitors

Tina Alster, MD

William G. Anlyan, MD\*

Leslie E. Bains

Philip J. Baugh

Santo J. Costa

Duncan McLaughlin Faircloth

Mike T. Gminski

Thomas M. Gorrie, PhD

Robert A. Ingram

Richard S. Johnson

John D. Karcher

Peter A. Karmanos Jr.

David L. Katz, MD

Bruce W. Knott

Gary S. Lachman

Anthony J. Limberakis, MD

Brandt C. Louie

Christy King Mack

Thom A. Mayer, MD

Susan B. Meister, PhD, RN

George James Morrow

Stelios Papadopoulos, PhD

Mary D.B.T. Semans\*

John Bush Simpson, MD, PhD

Sheppard W. Zinovoy

\*honorary member



CREDITS: P. 9: National Institutes of Health (NIH) building photo courtesy National Cancer Institute; P. 13: Signing ceremony photo courtesy National University of Singapore; P. 20: NIH Clinical Research Center photo courtesy National Institutes of Health/Department of Health and Human Services; P. 24: Paul Farmer photo courtesy Partners in Health; P. 25: Illustration courtesy Office of the Medical Center and Health System Architect.

Produced by the Office of Creative Services and Marketing Communications. Copyright © DUHS, 2007.  
MCOC-4689





Learn more about Duke Medicine at [dukemedicine.org](http://dukemedicine.org).

For information on how you can support Duke Medicine education, research, and patient care, please call **919-667-2500** or visit [development.mc.duke.edu](mailto:development.mc.duke.edu).



**Duke Medicine**

OFFICE OF THE CHANCELLOR

106 Davison Building  
Box 3701, Duke University Medical Center  
Durham, NC 27710

