

An Unrivaled View of the Heart

Journalist Gayle King, Oprah Winfrey's colleague and best friend, didn't feel as though there was anything wrong with her heart, but still she was worried. Both of her parents had died of heart disease at relatively young ages—her father at 47, her mother at 60. Now that she had turned 50, King feared that she too could fall victim to the disease that claimed her parents' lives, as well as those of one out of every two women who die in the U.S. each year.

In search of reassurance, King came to NYU Medical Center recently for a diagnostic test that uses a new type of cardiac scanner: the 64-slice CT scanner. The device belongs to a new generation of powerful imaging machines that can reveal the health of internal organs by taking finely detailed pictures of them.

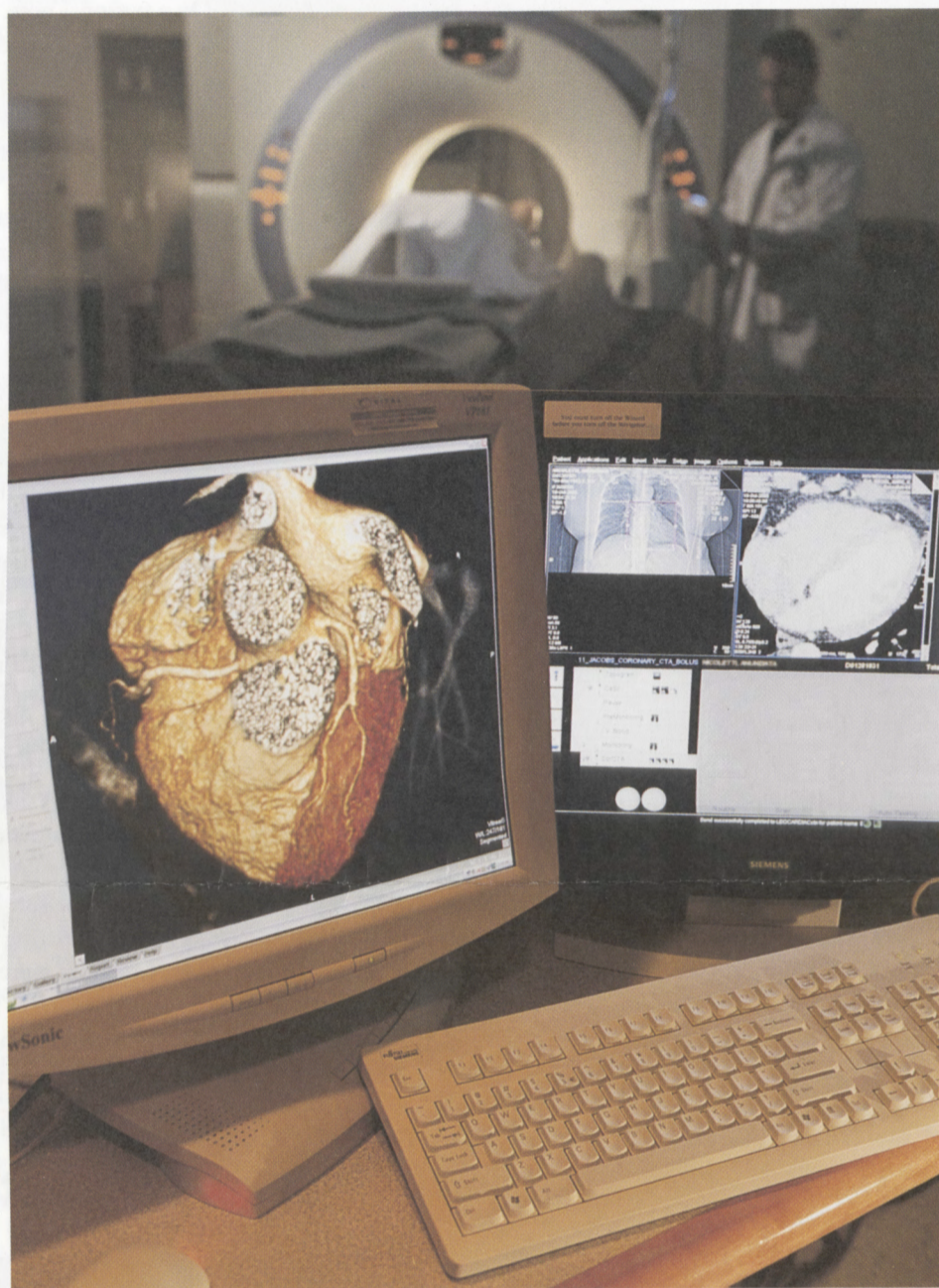
King was scanned with the device and the results were reviewed by Jill E. Jacobs, M.D., Associate Professor of Radiology, at NYU's Center for Biomedical Imaging, and broadcast nationally on *The Oprah Winfrey Show*. "Everything looks good," Dr. Jacobs told King, who was visibly relieved to learn that her arteries were not clogged with obstructing plaque.

Until recently, detailed pictures of the heart's arteries could be obtained only with angiography, which involves threading a catheter into the heart—a procedure not without risk. Each year in the U.S. some 2.2 million heart catheterizations are performed, and in about 25 percent of these patients there is no significant obstruction in their arteries. In other words, these patients are undergoing an invasive procedure unnecessarily, notes cardiologist James N. Slater, M.D., Associate Professor of Medicine.

The new scanner yields exquisite images of the arteries without invading the body. Inside the doughnut-shaped scanner a rotating X-ray tube and multiple detector panels move around the patient's body. Until now, CT scanners have taken 16 or 32 cross-sectional X-ray images with each rotation. The new machine takes 64 separate images of the heart with each rotation.

A computer then uses this information to produce three-dimensional pictures of a patient's heart at a much higher resolution than previously feasible. Once the patient is prepped and injected with a contrast solution, the scan takes 10 to 12 seconds—much faster than with earlier multi-slice scanners. The instrument is able to image arteries as small as 1.5 mm in diameter—tinier than the head of a pin. "This level of detail is proving sufficient for detecting and characterizing blockages in heart vessels and determining who needs further testing or treatment," says Dr. Jacobs.

The test can give peace of mind to people like Gayle King, who are healthy but have a family history of heart disease. And it may convince patients with early heart disease to mend their ways before it's too late. "I frequently see young diabetics who are very lax about getting follow-up exams and taking their medicines," says William J.



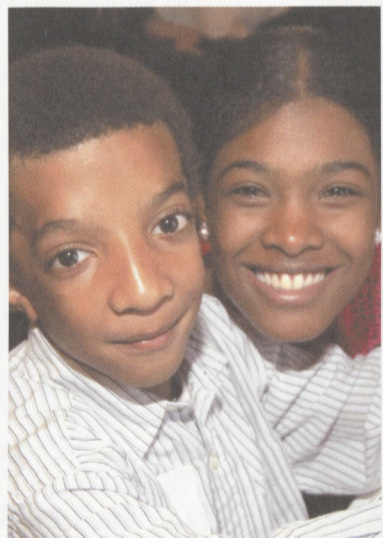
The 64-slice CT scanner, part of the latest generation of powerful imaging machines, reveals the health of the internal organs. At NYU Medical Center, it is currently used to obtain high-resolution images of the heart.

CONTINUED ON PAGE 7

Celebrating 50 Years of Smiles



JULIANA THOMAS (5)



INSTITUTE OF RECONSTRUCTIVE PLASTIC SURGERY More than 250 guests, including current and former patients, their families, and the physicians and staff of the Institute of Reconstructive Plastic Surgery

gathered at the Union League Club in November to celebrate a major milestone: the institute's 50th anniversary. Among the patients who beamed with pride were (from left to right) Yudelkys Morel, Jordan

Perez, Betsy McNally, Sara Pollack, and Gisela Dossey. "Today has been so heartwarming," said Dr. Joseph McCarthy, the institute's Director. "It has been a day of teamwork, families, love, and heroes."

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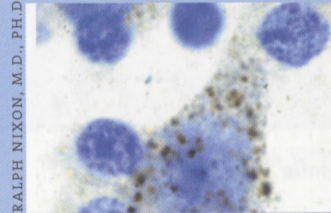
RENE PEREZ

2 Hepatitis B awareness in the Asian American community



JOANNE SAVIO

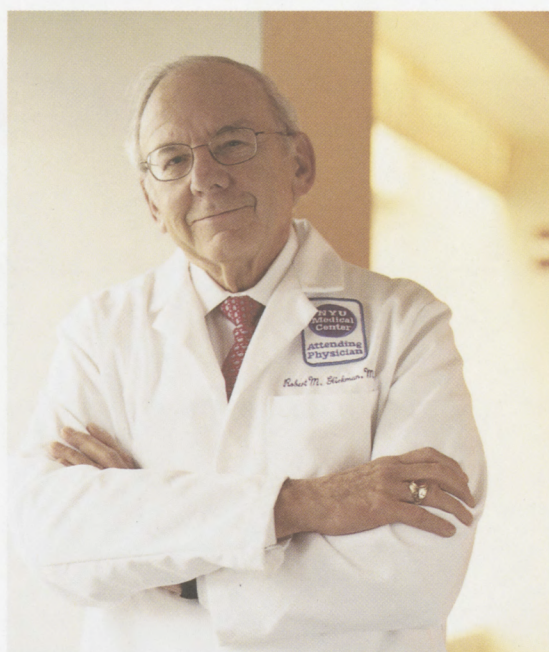
3 Dr. Vilcek pays back with gift of \$105 million



RALPH NIXON, M.D., PH.D.

4 When cells don't keep house

A Round of Thanks



Robert M. Glickman, M.D.

During this holiday season it's natural for us to consider all the reasons we have for being thankful, and to begin thinking about the year ahead and the possibilities for renewal that it brings.

As someone who presides over a large, complex medical center, I'm reminded every day how much we all owe to our faculty, staff, and students. They are truly the lifeblood of this institution, and by any measure they rank among the very best.

We are especially grateful to Joel and Joan Smilow, benefactors of the new research building, on the threshold of completion, that will bear their name. One day, I'm sure, many others will share our sense of gratitude as they benefit from the medical advances we expect such a wonderful research center to yield. Likewise, countless people will one day enjoy better health as a result of research that was nourished by the extraordinary generosity of Jan T. Vilcek, M.D., Ph.D., Professor of Microbiology, who recently gave \$105 million

to the School of Medicine for basic science research.

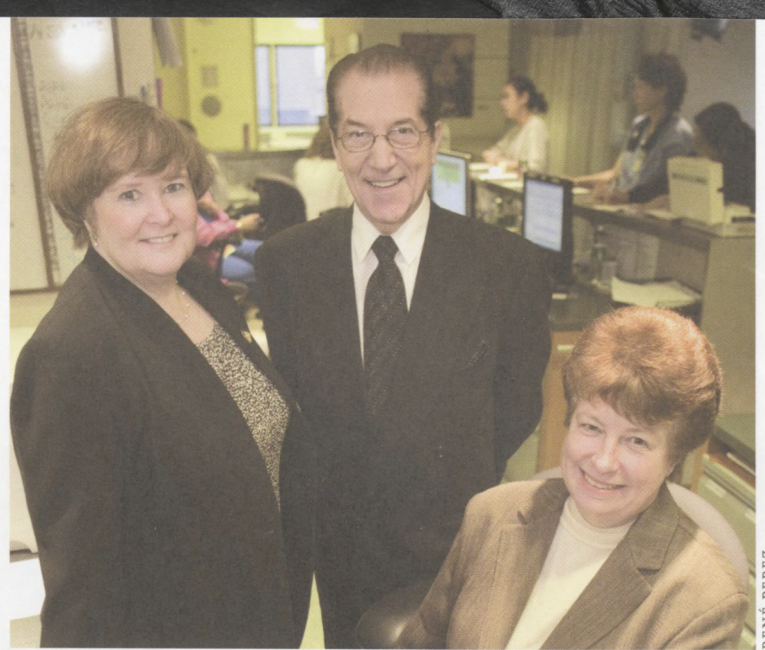
We can also be thankful for the much improved financial outlook for our Medical Center. This, again, is due to the hard work of everyone at the School of Medicine and Hospitals Center. At a time when the healthcare industry in New York is facing daunting financial challenges, NYU is holding its own.

With the imminent merger between NYU Medical Center and the Hospital for Joint Diseases, our institutional health promises to become even more robust. On a personal note, I would like to extend my appreciation to those on the various workgroups that were formed two years ago to ensure a smooth transition during this process. It will culminate in an official merger on New Year's Day, 2006.

On that same day, our Department of Pediatrics will get a new Chairman, ushering in what I expect to be a new era of excellence in this area for NYU. The department is at the start of an exciting period, with plans under way for expanded children's services at NYU Medical Center. These will include the enhancement of a number of pediatric subspecialties and the creation of the NYU Center for Children's Health, an outpatient facility that will optimize the effectiveness of the Medical Center's dedicated pediatric faculty and staff by bringing them together under one roof.

One of our facilities has already become a model for consolidating a broad range of services and delivering multidisciplinary, patient-focused care. The NYU Clinical Cancer Center, now in its second year of operation, is thriving beyond our expectations. It was recently ranked among the top 50 programs of its kind nationwide by *U.S. News & World Report*. Just one measure of its growing prestige is the recent special visit by the National Cancer Institute's chief operating officer, who was welcomed by more than 60 representatives of the NYU Cancer Institute.

As we celebrate the upcoming season, I wish everyone the happiest and healthiest of holidays. □



Elizabeth A. Duthie, R.N., M.A., Max M. Cohen, M.D., and Martha J. Radford, M.D.

Safety First, Last & Always

NYU Medical Center ranks among the top 1 percent of the nation's hospitals with the lowest mortality rates, according to a new study by the Institute of Healthcare Improvement. The study, which examined U.S. hospital mortality for Medicare patients, found that in 1998 NYU's mortality rate was 19 percent lower than that of all U.S. hospitals and improved even further over the next five years.

"We take care of very sick patients here, and our survival rate is higher than that of all but a handful of other hospitals in the country," said Max M. Cohen, M.D., Chief Medical Officer for NYU Hospitals Center.

The study found that from 1998 to 2003 NYU's mortality continued to improve, dropping 30 percent, compared to a 13 percent decline in the mortality rates of all other hospitals.

The issue of hospital safety gained national attention in 1999,

when the Institute of Medicine attributed to medical errors the deaths of up to 100,000 hospital patients annually. Dr. Cohen is spearheading NYU's efforts to place an even greater emphasis on quality. He recently announced two new positions to ensure that patient safety remains a priority. Elizabeth A. Duthie, R.N., M.A., a 30-year veteran of NYU Medical Center, has been appointed Director of Patient Safety, and Martha J. Radford, M.D., previously Director of Clinical Quality at Yale New Haven Health System, was named Chief of Clinical Quality.

Ms. Duthie will work with physicians and staff to ensure that NYU complies with all regulatory mandates for patient safety. Dr. Radford will champion clinical quality improvement and patient safety.

"Our goal," said Dr. Cohen, "is to be the hospital that has the lowest risk-adjusted mortality in the country." □

First and Only of its Kind

NYU's Center for Asian American Health was formed in 2003 to address major health disparities in the city's and the country's Asian populations through research, education, and outreach. It is the first, and still the only, center of its kind in the nation, and it has garnered more than \$12 million in grants in just two years. Among the health problems the center addresses are liver disease, mental health, occupational health, infectious disease, heart disease, and diabetes.

In 2004 the center received a major grant to conduct hepatitis B screening in New York City. It has since organized two national conferences and hosted a site visit by the President's Advisory Commission on Asian Americans and Pacific Islanders. That visit afforded NYU an unusual opportunity to impress upon the federal government the diverse and serious healthcare needs of Asian American communities.

Most recently, the center received a \$1.8 million grant in support of project ASPIRE (Asian American Partnerships in Research and Empowerment), which will focus on cardiovascular disease prevention in the Filipino American community. This three-year grant for Community Participation in Health Disparities Intervention Research was awarded by the National Center for Minority Health and Health Disparities at the National Institutes of Health.

Raising Hepatitis B Awareness Among Asian Americans



Liver cancer is now the fastest-rising cancer in the U.S., with by far the highest prevalence among Asian Americans. Nonetheless the primary underlying cause of the disease—the hepatitis B virus—gets scant attention in New York City's Asian communities.

NYU's Center for the Study of Asian American Health

is leading the first major effort to erase this glaring health disparity: the NYC Asian American Hepatitis B Program. Recently refunded for a second year, the program is working to screen, educate, vaccinate, and treat Asian Americans in the city for hepatitis B. The disease can be transmitted through unprotected sex, sharing of needles, contact with infected blood, or from mother to child at birth.

The second year of the program is underwritten by \$2.6 million in funding from the New York City Council and the New York State and City Departments of Health. According to Mariano J. Rey, M.D., Director of the Centers for Health Disparities Research at NYU and the program's administrative principal investigator, the program's long-term goal is to establish a national model for hepatitis B prevention in Asian American communities.

So far the program, a coalition of healthcare and community-based organizations, has tested more than 2,000 people in Chinese and Korean neighborhoods in Manhattan, Brooklyn, and Queens. About half of those screened required referrals for vaccination to prevent the disease or for follow-up care, confirming a high burden of infection in the city's Asian community, now almost a million strong.

Many who are chronically infected remain symptom-free for years, even decades. Thus it's common for people to learn that they have hepatitis B when the disease is far along the road to liver failure or liver cancer and is resistant to treatment. "If you're Asian," says Ruchel Ramos, the program's Director, "screening for hepatitis B is as important as screening for cholesterol." And just as simple—only a blood test is required. This year the program will expand its efforts by reaching out to the city's South Asian residents. For information, call (212) 263-3236. □

Paying Back: Dr. Vilcek Gives NYU \$105 Million

When Jan T. Vilcek, M.D., Ph.D., arrived in America 40 years ago with, in his words, only “two suitcases full of useless stuff,” the young immigrant scientist had no idea that he would one day become a wealthy man, enabling him to reward his new employer, NYU Medical Center, for taking a chance on him.

But that's just what happened. He did indeed attain substantial wealth, and he shared it generously with the employer who believed in him.

In August of this year, Dean and CEO Robert M. Glickman, M.D., announced that Dr. Vilcek, Professor of Microbiology, had made the School an extraordinary gift of \$105 million—the largest sum ever donated to the School of Medicine, and one of the largest ever given to a school or healthcare institution in New York City.

The source of Dr. Vilcek's wealth was his discovery—with his colleague, Junming Le, Ph.D.,

Adjunct Associate Professor of Microbiology—of a monoclonal antibody, the basis of Remicade, which today benefits hundreds of thousands with rheumatoid arthritis and other diseases.

Why did he make such a generous gift? Out of gratitude to the Medical Center, he says, for hiring him in 1965 without a single research grant under his belt. He had escaped from Communist Czechoslovakia with his wife, Marica. Over the years, he would find other reasons to be grateful. When Marica fell seriously ill, it was to NYU that they turned for care.

In May, Dr. Vilcek was awarded the Albert Gallatin Medal, the University's highest honor. His gift will be used to support the basic sciences. “I view my gift as a prudent investment in the future of biomedical science at the School of Medicine,” says Dr. Vilcek. “I want more talented young medical scientists to be able to join NYU and develop their careers here as I did 40 years ago.” □



JOANNE SAVIO
Kenneth G. Langone, Chairman of NYU Medical Center's Board of Trustees, meets with Jan T. Vilcek, M.D., Ph.D., and Dean and CEO Robert M. Glickman, M.D., following the announcement of Dr. Vilcek's gift.

Super-Clean Vaccine Lab to Open



JULIANA THOMAS
Drs. Nina Bhardwaj, David O'Neill, and Sylvia Adams, an oncologist, in the new Vaccine and Cell Therapy Laboratory. Dr. Bhardwaj is already testing a dendritic cell vaccine for preventing the recurrence of melanoma, the deadliest form of skin cancer.

Construction workers are putting the final touches on a new ultra-clean facility for producing custom-made cancer vaccines and other immunotherapies—work that must be kept virtually free of contaminants. The facility, known as the Vaccine and Cell Therapy Laboratory, is located in the Perelman Building (the Rusk Research Building). The first lab of its kind at NYU, and one of only a handful in the city, it is slated to open in 2006.

The laboratory will serve as NYU's core facility for making and monitoring immunotherapies—highly promising treatments in which the body's own immune cells are mobilized to fight disease. Other types of therapies, such as those based on stem cells, could be developed in the lab as well.

“The lab will be an important stimulus to NYU's work in immunotherapies,” says Nina Bhardwaj, M.D., Ph.D., Professor of Medicine, Pathology, and Dermatology and Director of the Cancer Vaccine Program, a leader in this fast-growing field. “Until now, we've had to do this work in outside facilities, which has been both expensive and inconvenient.”

A variety of measures will be used to keep the lab free of contaminants, such as bacteria and viruses, including high-powered air filters that can purify the air to the “class 10,000 level” (meaning that there are just 10,000 microscopically sized particles per cubic foot of air).

“That sounds like a lot, but it is about the same level of cleanliness as a sterile operating room,” says David O'Neill, M.D., Assistant Professor of Pathology and the lab's Director. (By comparison, the average hospital room is considered to be about class 100,000, and the average home class 300,000.) Potential contaminants are also blocked by requiring lab workers to don two sets of head-to-toe gowns as they make their way along an entry corridor protected by heavy doors, and by using positive air pressures, blowing air outward whenever a door is opened. □

• IN BRIEF

How Cancer Affects Pregnancy

NYU Cancer Institute was recently designated one of three centers of excellence—and the only one on the East Coast—by Fertile Hope, a non-profit organization that helps cancer patients faced with infertility. Fertile Hope's program recognizes cancer centers that actively address the reproductive concerns of cancer patients and survivors by informing them about their risks; providing educational materials for healthcare professionals, patients, and survivors; making referrals to appropriate fertility specialists; and conducting research on cancer-related infertility, pregnancy, and parenthood. Of the more than 9 million cancer survivors in America today, 10 percent were diagnosed during their reproductive years.

NYU Cancer Institute will be featured on Fertile Hope's Web site: www.fertilehope.org and achieve wider public recognition as a result of the designation. NYU's collaboration with Fertile Hope will build on the collective strength of the Medical Center's team of cancer and fertility experts.

Rusk Network Established

Starting January 1, 2006, the Medical Center will launch the Rusk Institute Rehabilitation Network. The network, which includes six skilled nursing facilities in Manhattan, Brooklyn, Queens, and the Bronx, will offer sub-acute rehabilitation services not available at Rusk and the Hospital for Joint Diseases (HJD), which offer only acute rehabilitative care. The Rusk Network will provide continuity of care to patients as they transition from our acute rehabilitation services. It will also serve patients whose severity of illness now makes them ineligible for care at Rusk and HJD. For more information, call (212) 404-3768.

CELEBRATING 50 YEARS OF SMILES CONTINUED FROM PAGE 1

When Betsy McNally gave birth to her daughter, she was heartbroken to see that Jenna had a facial deformity, but not surprised. Betsy had Crouzon's syndrome—a genetic defect that caves in the midsection of the face, often makes the nose beak-shaped, and causes the eyes to bulge—and she knew there was a 50 percent chance that so would her child. When a geneticist once opened a textbook to review Betsy's condition with her, she recalls, she was startled to see her own face on its pages.

Diagnosed at the age of six, Betsy has had five surgeries to correct her appearance. The first, at age 14, was performed in 1964 by the late John Marquis Converse, M.D., the first Director of NYU's Institute for Reconstructive Plastic Surgery and the first to apply a multidisciplinary team approach to the rehabilitation of those with facial differences. Her last was performed in 1991 by Joseph G. McCarthy, M.D., the Lawrence D. Bell Professor of Plastic Surgery and the institute's current Director. Dr. McCarthy, himself a pioneer in reconstructive techniques, has also operated three times on

Jenna, now a 19-year-old student at Lafayette College.

On a gloriously sunny Saturday in November, at the Union League Club in Murray Hill, Dr. McCarthy and his colleagues welcomed mother and daughter, along with about 100 other current and former patients of the institute, at a reunion to celebrate its 50th anniversary. The largest plastic surgery unit in the country, the institute annually treats more than 3,000 patients with all types of conditions. Many pay little or nothing, thanks to funding from the National Foundation for Facial Reconstruction. These grants were used to found the institute and have supported it since its opening.

Betsy McNally was one of a score of grateful people who took turns at the podium to show the handiwork of Dr. McCarthy and his colleagues from different specialties. They include Court Cutting, M.D., Associate Professor of Surgery (Plastic Surgery) and Director of the Cleft Lip and Palate Clinic, and Barry Grayson, D.D.S., Associate Professor of Surgery (Orthodontics). One by one, patients explained that they took pride in being the

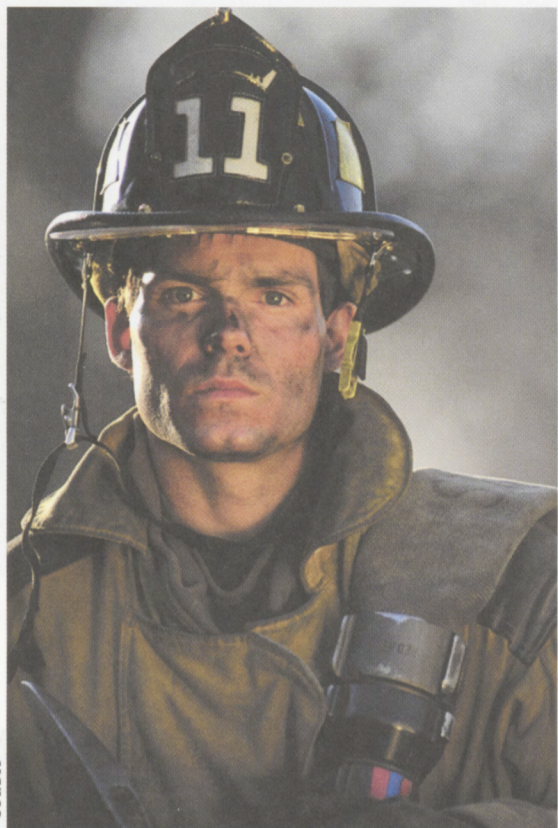
center of attention, perhaps for the first time in their lives. From the corner, cheerful melodies poured forth from George Barboza, whose surgeries on his left hand didn't seem to affect his piano playing one bit. Later, Johnny Mathis's rendition of “Smile” urged the attendees to “light up your face with gladness, hide every trace of sadness.”

Betsy heeded the song's wisdom. “A facial difference isn't a curse,” she said, choking back tears. “It's a gift. It makes you work harder at becoming the best person you can be. When you have friends, you have truer friends.”

No one understands that better than Sage Volkman, a 24-year-old graduate student at the University of Utah. At the age of five she suffered third- and fourth-degree burns on more than 70 percent of her body, and most of her 78 surgeries have been performed at NYU. “Before they would put me to sleep I was always scared,” she recalled, “until I looked at Dr. McCarthy's eyes behind that mask. They were so kind.”

“In a room filled with facial differences,” noted one of the last speakers, Scott Donnelly, “all of our faces share the same expression. Look around, everyone. We are all smiling. Widely. Honestly. And gratefully.” □

Marking Asbestos-Induced Cancer



Asbestos, once valued for its flame-resisting properties, has posed a dire health risk to firefighters and other workers.

The mineral asbestos was once celebrated for its flame-resisting, insulating qualities. But now it has a more infamous reputation for its cancer-causing properties. Asbestos can break into tiny fibers. When inhaled, these fibers may cause pleural mesothelioma, a deadly cancer that invades the pleura, the lining of the chest cavity and the lungs. Researchers at NYU School of Medicine and Wayne State University have now

found a molecule, a biomarker, that reveals the early stages of this cancer. This development inspires promise of a way to reliably screen for this disease.

An estimated 7.5 million workers in the United States have been exposed to asbestos. Among them are foundry workers, pipe fitters, shipbuilders, miners, electricians, factory workers, firefighters, and construction workers. Many asbestos-containing materials have been banned. Nonetheless, U.S. government statistics indicate that asbestos remains a hazard to some 1.3 million people who work in construction and building maintenance.

In a study recently published in *The New England Journal of Medicine*, Harvey Pass, M.D., and colleagues found that blood levels of the biomarker—a protein called osteopontin—could be used to help monitor people at risk of developing cancer due to asbestos exposure. Regular blood tests could reveal persons in the early stages of mesothelioma.

“I would really like to see more patients diagnosed early,” says Dr. Pass, recently appointed Chief of the Division of Thoracic Surgery and Thoracic Oncology in the Department of Cardiothoracic Surgery, and Professor of Surgery, the lead author of the study. “There are therapies that will help patients live longer,” he says.

Pleural mesothelioma often takes decades to develop. When it is diagnosed late, the outlook is often grim: patients may live only nine to 12 months. In fact, fewer than 5 percent of mesothelioma cases are detected early, when treatment can be more successful.

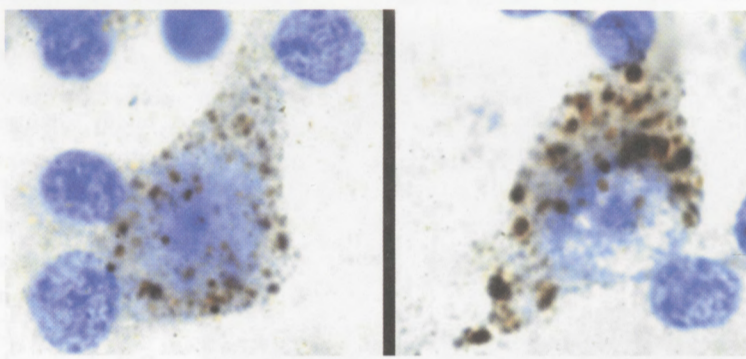
There has been no way to reliably screen for this type of cancer. “What is crucial,” Dr. Pass says, “is that this biomarker is very encouraging specifically in asbestos-related early-stage disease.” □

When Cells’ Housekeeping Fails, Alzheimer’s May Follow

The cells of the body normally keep house well. Materials are transported into and out of the cell; some are demolished, others recycled. But sometimes that housekeeping is flawed, as, for example, in Alzheimer’s disease. Detecting the first signs of trouble could permit a better diagnosis of the disease, says Ralph A. Nixon, M.D., Ph.D.

His new multidisciplinary \$9.1 million grant from the National Institute of Aging is geared toward studying these cellular housekeeping problems, both in the tissue of deceased patients and in live cells. “Most importantly, the grant will allow us to study changes at the earliest phases of the disease,” says Dr. Nixon, Professor of Psychiatry and Cell Biology, Vice Chairman of Psychiatry at NYU School of Medicine and Director of the Center for Dementia Research at the Nathan Kline Institute for Psychiatric Research.

The evidence of Alzheimer’s, it appears, is not only in the brain. “The brain will be disproportionately affected, but the changes may be found in all cells,” says Dr. Nixon. Detectable signs of Alzheimer’s are found in the internal housekeeping system of all cells, the so-called endocytic-autophagic-lysosomal system. Studies with cells in the tissue from deceased patients reveal that their endosomes, which are cellular compartments that sort and transport proteins, balloon in size.



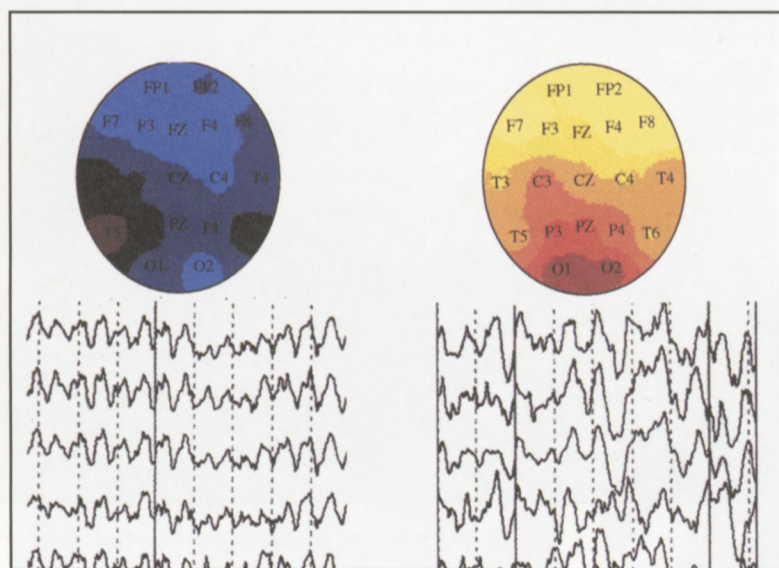
In healthy brain tissue (left), the brain cells’ internal housekeeping compartments, called endosomes (brown dots), aren’t enlarged. But in brain tissue affected by Alzheimer’s (right) the endosomes, where protein sorting occurs, are bloated, indicating dysfunction.

RALPH A. NIXON, M.D., PH.D.

The researchers seek to move beyond working with post-mortem tissue, hoping to watch the disease progress in more readily accessible, live cells. Those observations could lead to an easier way to diagnose Alzheimer’s. The researchers base their expectations on the fact that people with Down syndrome almost always develop Alzheimer’s in their 50s. Studying the skin cells of these individuals showed that these cells had housekeeping problems associated with Alzheimer’s.

Dr. Nixon’s team will use part of the new grant to find methods to compare changes in these skin cells to changes in brain cells in the early stages of Alzheimer’s. The research effort includes Dr. Nixon and other researchers at Nathan Kline, as well as at the Albert Einstein College of Medicine and at McLean Hospital in Boston. □

Old Brain Test Makes New Waves



A side-by-side comparison of baseline EEG traces of the frontal regions of the brain in two individuals. On the left is the EEG of a normal elderly person who does not decline cognitively. On the right, an EEG of a person who will decline over the next seven years. The slower, deeper waves on the right show abnormal theta (brain wave) activity, foreshadowing dementia. The color-coded images above the EEGs reflect the theta activity. The blue shows normal activity and the yellow, significant excess of theta.

EEGs (electroencephalograms) have long been used to diagnose brain seizures. Now it appears that this painless brain test may one day also prove valuable as a screening tool to detect the earliest signs of Alzheimer’s disease. Using leading-edge computer programs, School of Medicine scientists recently showed that the EEG, which measures the brain’s electrical activity, accurately predicted which healthy people in their 60s and 70s would develop dementia over the next seven to 10 years. It was almost 95 percent accurate in identifying those who would decline cognitively.

“Our results suggest that quantitative analysis of the EEG is sensitive to the earliest signs of

the dementing process,” says Leslie S. Prichep, Ph.D., Associate Director of the Brain Research Laboratories in the Department of Psychiatry, who led a study published in the journal *Neurobiology of Aging*.

The researchers evaluated 44 people between the ages of 64 and 79 who felt that their memories were faltering and who were part of a long-term volunteer study at NYU’s Silberstein Aging and Dementia Research Center. There they underwent a battery of neuropsychiatric and other tests, which revealed that their brain function was normal for their age. After these tests, each volunteer was also given a baseline EEG test at the Brain Research Laboratories. Volunteers

were given EEGs several more times over the next seven to 10 years. During this period, 27 of the 44 subjects developed mild cognitive impairment or full-blown dementia.

It takes about 30 minutes to perform an EEG, which involves placing recording electrodes on the scalp. Injections aren’t required; the scalp isn’t shaved.

Dr. Prichep says the brain test may become one of the tools used to evaluate a person’s propensity for developing Alzheimer’s, the most common form of dementia affecting people over 65. But before the test can be applied to screen large populations, she says, the results need to be replicated in and validated by much larger studies. □

Long-Sought Switch for Neuron Insulation Found

Just as electrical wires are protected by insulation, many nerve fibers are wrapped in myelin, which ensures swift and efficient communication in the nervous system. Although myelin, a fatty substance, was identified nearly 200 years ago, scientists have not known until recently what initiated its production. Now School of Medicine researchers, led by James Salzer, M.D., Ph.D., Professor of Cell Biology and Neurology, and Carla Taveggia, Ph.D., have identified the molecular switch that does this.

Their study, published in a recent issue of the journal *Neuron*, may provide a new avenue for treating nervous system diseases associated with myelin damage, such as multiple sclerosis. Using a sophisticated system for growing nerve cells in laboratory dishes, and genetically engineered mice, the scientists identified a gene called neuregulin as the myelin signal in nerves in the peripheral nervous system (outside the brain and spinal cord). The neuregulin gene encodes a growth protein made by neurons.

Dr. Salzer’s group is now investigating whether neuregulin has the same effect on myelination in the central nervous system—the brain and spinal cord. If so, it may one day be possible to repair damaged spinal cords and brain tracts that have lost their myelin due to injury or disease by transplanting into, or turning on, a functioning neuregulin gene in nerve cells.

“Is it possible that this same switch can reprogram a nerve cell that has lost myelin due to injury or disease to repair itself?” asks Dr. Salzer. “That is a key question that our laboratory and others are now actively trying to answer.” □

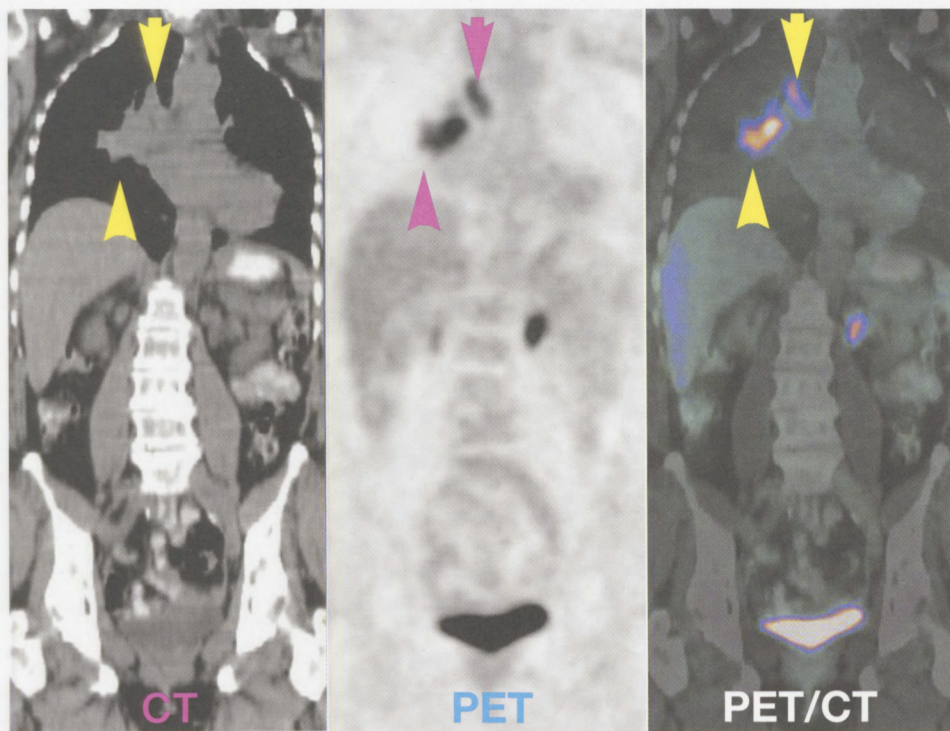
Double-barrelled Imaging Enhances Early Detection

Through a multi-year agreement with Siemens Medical Solutions USA, Inc., a new generation of imaging machines, including PET/CT and the 7-tesla MRI, have been brought into the Medical Center, where they are being used for a variety of clinical and research purposes.

The PET/CT scan combines two different but complementary imaging technologies, and it is being used at NYU to diagnose cancer. The PET (positron emission tomography) half of the scanner measures the function of cells. Cancer cells tend to be more active than normal cells, so malignancies appear as patches of brighter color on the display screen. The CT (computed tomography) scans provide information about the anatomic location of tumors, including their size and shape.

"By fusing images from the two technologies, we can get a highly accurate picture of how active a cancer is and where it is located," says Elissa L. Kramer, M.D., Professor of Radiology and Chief of Nuclear Medicine. Such information is leading to earlier detection of cancers, especially recurrent cancers, reducing the need for biopsies, improving the staging of lung cancer and lymphoma, and revealing tumors that on other scans may be obscured by scarring from surgery or radiation therapy.

A new scanner was installed in the NYU Clinical Cancer Center in April and is being used to evaluate patients with breast, cervical, esophageal, head and neck, lung, and ovarian cancers, lymphoma, and melanoma. For information, call (212) 731-5001. □



Imaging scans of a 67-year old woman recently diagnosed with lung cancer. The CT scan showed the location of a tumor (arrowhead) and possible metastases. The PET scan revealed the lung tumor and cancer spreading to the lymph nodes (arrow). The combined PET/CT precisely located the metastases in the lymph nodes and showed that the cancer had not spread elsewhere. Such information is crucial for planning treatment.

KENT FRIEDMAN, M.D.

Why Scientists Are Raving

When researchers describe the images produced by the 7-tesla MRI, they have been known to gush. "The detail is spectacular," says Joseph A. Helpert, Ph.D., Director of NYU's Center for Biomedical Imaging (CBI) and Professor of Radiology, Psychiatry, and Physiology and Neuroscience, referring to the images the machine produced of breast tissue. "We're getting roughly four times the resolution of the next best MRI scanner, and a corresponding increase in information about human anatomy and biochemistry."

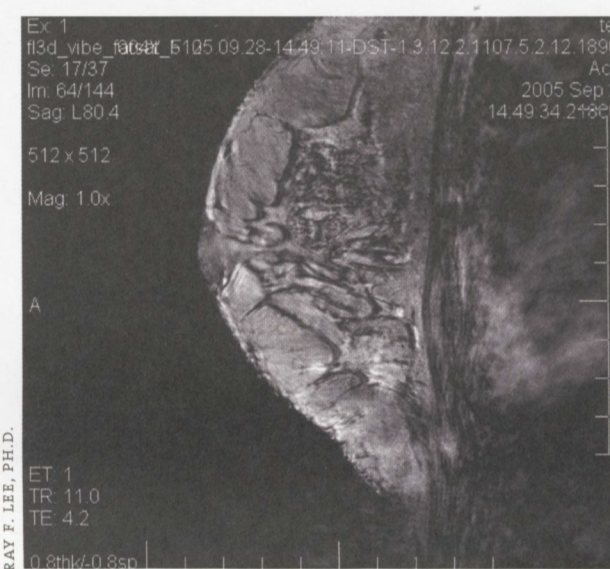
The 7-tesla is the most powerful MRI of its kind. Only a handful exist in the U.S., and they yield images of unparalleled quality. "Compared to other MRI scanners, the 7-tesla is like high-definition TV," says oncologist Howard Hochster, M.D., Professor of Medicine, who has won a grant from the National

Institutes of Health to use the magnet to study levels of a chemotherapy drug in pancreatic tumors.

The scanner was installed last fall. This year researchers have been fine-tuning the machine to produce images of various kinds of tissue in the body, and next year studies should begin that will explore its clinical utility.

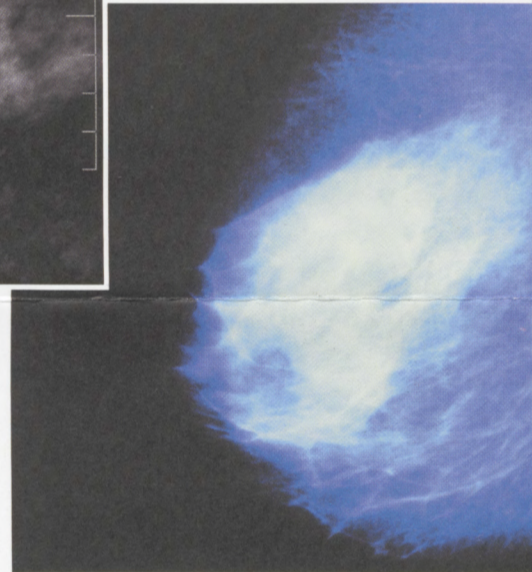
Expectations are high for this machine because it measures various elements in the body, which older MRI machines could not do. Researchers hope that this capability will enable them to observe biochemicals that may serve as markers of tumor activity, providing an early and highly sensitive means of monitoring how tumors are responding to treatment, among other uses.

Stay tuned for further news as clinical studies with the 7-tesla begin. □



The first breast image ever obtained with the 7-tesla MRI (above), shows dense fibrous tissue in far greater detail than a mammogram (right). While milk ducts are not distinguishable in a mammogram, they are discernible with the help of the 7-tesla. Doctors hope this extraordinary detail will make possible earlier diagnoses of cancer. The MRI image was generated by Ray F. Lee, Ph.D., Assistant Professor of Radiology, and his team.

ALIX/PHANIE / PHOTO RESEARCHERS, INC



RAY F. LEE, PH.D.

Top Care for the Esophagus



Morris Traube, M.D., J.D.

Morris Traube, M.D., J.D., one of the country's leading experts on esophageal disease, has been appointed Professor of Medicine and Director of NYU's new Center for Esophageal Disease. The center will focus on the diagnosis, treatment, and research of esophageal disorders, including gastroesophageal reflux disease (GERD), Barrett's esophagus, esophageal cancer,

and swallowing and muscle disorders. The center's focus will include the typical and the atypical, including, for example, the evaluation of patients with asthma or hoarseness, now increasingly recognized as manifestations of esophageal reflux.

"Only in the last decade have we begun to understand how GERD manifests itself in the throat and lungs," notes Dr. Traube.

Located on the ninth floor of the Skirball Institute of Biomolecular Medicine, the center is equipped with the most sophisticated diagnostic tools. NYU Medical Center is currently the only hospital in New York City to offer swallowing assessment by impedance, a test used to determine whether non-acid reflux is the source of discomfort.

The center is fully integrated with the School's Division of Gastroenterology, and will work closely with NYU otolaryngologists, radiologists, laparoscopic and thoracic surgeons, infectious disease specialists, and therapists at the Swallowing Disorders Center at the Rusk Institute. Dr. Traube, who previously served as Professor of Medicine at the Yale University School of Medicine, is also a lawyer and a rabbi. For information, call (212) 263-3095. □

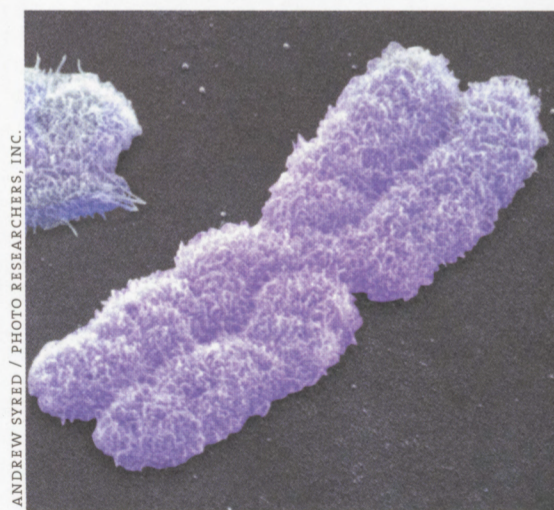
X Marks the Spot: Testing Risk of Cancer on the X Chromosome

Like a prospector panning for gold, researcher David J. Araten, M.D., used the biological equivalent of a strainer to identify a gene on the X chromosome that mutates more often in individuals at risk for cancer. If further studies bolster this initial finding, he says, the gene could be used as a kind of sentinel. When incorporated into a test, it could help to identify people who have a genetic predisposition to cancer and to decrease their risk of developing the disease.

"The mutation rate of genes is widely believed to be a critical factor in the development of cancer, but it has been difficult to study in human cells," says Dr. Araten, Assistant Professor of Medicine. He solved this dilemma with the help of an instrument called a flow cytometer.

As prospectors pan tons of dirt to find a few precious nuggets of gold, so does the instrument rapidly sift through millions of cells to identify those containing rare mutants of the PIG-A gene. These cells lack certain proteins on their outer membranes.

In a recent study in *Cancer Research*, Dr. Araten, who joined the School from Memorial Sloan-Kettering Cancer



A colored scanning electron micrograph of an X chromosome, one of the sex chromosomes.

Center, found that each time a cell divides in individuals without a genetic predisposition to cancer, the chance of a mutation in the PIG-A gene reached about 1 in 3 million cell divisions. But among those persons with a predisposition, the mutation rate was much higher. The upper part of the range was close to 1 in 100,000 per cell division. "The higher the mutation rate," says Dr. Araten, "the more quickly cells will acquire the mutations that can cause cancer." □

ANDREW STREED / PHOTO RESEARCHERS, INC

JULIANA THOMAS

NYU Medical Center is governed by two boards of trustees: the NYU School of Medicine Foundation Board and the NYU Hospitals Center Board. Together, they play a critical role in charting the course of NYU Medical Center, ensuring the well-being of the institution through philanthropy, participation on board committees, and recruitment of new board members. Each issue of NEWS & VIEWS will introduce several trustees to the Medical Center community.

HELEN L. AND MARTIN S. KIMMEL

Helen L. and Martin S. Kimmel, Life Trustees of NYU Medical Center, are among our most steadfast and generous benefactors. Mrs. Kimmel, a Medical Center Trustee since 1984, is also a Life Trustee of New York University. Mr. Kimmel, a Medical Center Trustee since 2000, is Cofounder and Chairman Emeritus of Kimco Realty.

Mr. and Mrs. Kimmel have endowed fellowships in molecular immunology and pharmacology, and support programs in such important areas as epilepsy research, rehabilitation, urology, cancer, and vascular research. In 2005 they made an exceptional gift to establish a world-class Center for

Stem Cell Biology to link NYU scientists and laboratory groups working in developmental genetics, structural biology, and cancer biology. The center focuses on the biology of animal stem cells, for the eventual treatment of a wide range of human diseases. Another facility that bears their name is the Helen and Martin Kimmel Center for University Life at NYU's Washington Square campus.

Mr. Kimmel serves as a Trustee of both the United Jewish Federation and the Eaglebrook School. Together the Kimmels serve on the Board of Governors of the Weizmann Institute of Science, where they both received honorary doctorates, and are actively involved in AIPAC and the American Jewish Committee.

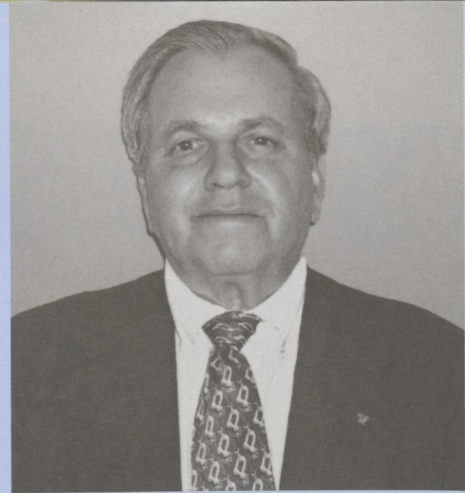
For her service to the University, Mrs. Kimmel in 1999 was awarded the Gallatin Medal, the University's highest honor. Both Helen and Martin Kimmel were honored recently with Presidential Citations for contributions to the School of Medicine at Dean's Honors Day.

JOEL E. SMILOW

Joel E. Smilow is Chairman and Co-owner of Dinex Group, LLC, a company he formed in 1992 with renowned chef Daniel Boulud. His national restaurant



Helen L. and Martin S. Kimmel



Joel E. Smilow

group owns five celebrated restaurants, including Daniel, Café Boulud, and db Bistro Moderne in New York City.

Previously, Mr. Smilow was Chairman and CEO of Playtex Products, Inc., from which he retired in 1995, after having been President and/or Chairman of the company or its predecessors for more than 25 years. A Yale alumnus, he graduated with distinction from Harvard Business School as a George F. Baker Scholar.

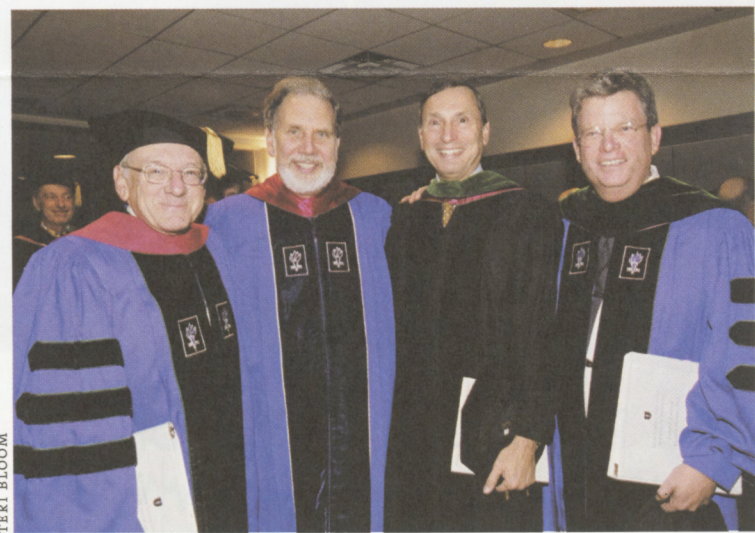
A Trustee of both the University and NYU Medical Center since 1997, Mr. Smilow has said that one of the greatest rewards of business success has been that it enabled him to support a variety of not-for-profit causes, with emphasis on the fields of higher education (Yale), youth services, and medicine (basic research).

Nowhere is the Smilow generosity

more evident than in the Joan and Joel Smilow Research Center, a world-class multidisciplinary 13-story research building for basic science, scheduled to open in spring 2006. The Smilows have also sponsored the Joan and Joel Smilow Cardiac Prevention and Rehabilitation Center, the largest program of its kind in the region, and have endowed a Professorship in Cardiology at the School.

For the past 30 years, Mr. Smilow has been a leader in the Madison Square Boys and Girls Club of New York, serving at various times as the organization's President, Chairman, and Chairman of the Executive Committee. In May 2005 the Harvard Business School Club of New York presented Mr. Smilow with its Leadership Award for "Making a Difference in the World." □

**Celebrating the Academy
Dean's Honors Day**



TERI BLOOM

At Dean's Honors Day, Dean and CEO Robert M. Glickman, M.D., with NYU President John Sexton, J.D., Radiology Chairman Robert I. Grossman, M.D., and Vice Dean Richard I. Levin, M.D.

*Gaudeamus igitur. / Vivat academia.
Vivat professores.*

Let us therefore rejoice. / Long live the academy.
Long live the professors.

These Latin phrases come from the oldest of student songs, "Gaudeamus Igitur," which traces its roots back to the 13th century. Before a packed Farkas Auditorium and a Webcast audience, Richard I. Levin, M.D., Vice Dean for Education, Faculty, and Academic Affairs, invoked the spirit of these words as he opened the fourth annual Dean's Honors Day Convocation. The event was held on November 1 to recognize individual faculty members who have, as Dean and CEO Robert M. Glickman, M.D., said, "brought distinction both to our profession and to our institution."

The atmosphere, though formal and celebratory, was lightened on many occasions by colorful details about the achievements and biographies of the honorees. Who in the select group is also a tailor and inventor? A master bicyclist of Manhattan's mean streets? A photographer of scenery and cells? A saxophonist? A Red Sox fan? A fanatical shopper? A Black Belt in the 5000-year-old art of Shorinji Kempo? (For the answers, see page 7.)

The ceremony closed with NYU President John Sexton conferring the University's Presidential Citation on Mrs. Helen L. and Mr. Martin S. Kimmel, Life Trustees of the Medical Center and the University, who were hailed as "tireless champions" of the institution.

"Am I Ready for This?"

THE CLASS OF 2009 GETS CLOAKED IN WHITE COATS

Walking across the stage was both "frightening" and "exhilarating," says Alisa Arunamata, one of the 162 members of the Class of 2009 at NYU School of Medicine who took part in the annual White Coat Ceremony in late August.

At the ceremony first-year medical students receive their white coats and recite their professional vows, including a pledge "to devote my life to the service of humanity." Parents, family, friends, and teachers also take an oath to support the students, and to help and respect them.

Robert M. Glickman, M.D., Dean and CEO, welcomed the students, congratulating them on their career choice. Daniel F. Roses, M.D., the Jules Leonard Whitehill Professor of Surgery and Oncology, gave the keynote address on the topic

"NYU and the Legacy of Medical Humanism."

Derek Daniel Reformat, Class of 2009, feels that the garment is "an award" for getting into medical school. Arunamata (see photos below) agrees, but as she approached the stage, she recalls that she felt a surge of panic, thinking, "Am I ready for this?! Do I have what it takes to actually wear this white coat?" Crossing the stage, she reached her designated physician, Mary Ann Hopkins, M. Phil., M.D., Assistant Professor of Surgery, and then struggled to get her arm properly into the coat. Turning around, she blurted, "I'm scared!" Dr. Hopkins laughed and said, "Med school is fun and you'll absolutely love it." Reassured, Arunamata says she now believes that someday she might be the one "coating bright-eyed and nervous first years." □



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HEART CONTINUED FROM PAGE 1

Cole, M.D., Clinical Assistant Professor of Medicine. "But when you show them a picture of a blocked artery in their heart, it gets their attention."

The test is perhaps most helpful in cases where the patient doesn't have clear-cut risk factors for heart disease. Such patients may have borderline results on a stress test or unusual chest pain that isn't necessarily associated with exercise, and mild hypertension. "We don't know whether these patients really have heart disease, and in the past we could offer only catheterization," says Dr. Slater. "Now, if the results of the CT show that they don't have disease, they can be spared an invasive test."

Despite its promise, the 64-slice CT scanner does have limitations. It does not portray the degree of obstruction in narrowed arteries as clearly as an angiogram, so a follow-up angiogram is necessary when the CT scan shows significant narrowing in the arteries. And radiation exposure is a concern—just one of these CT scans exposes the patient to nearly 20 percent of the yearly maximum dose of radiation that the government deems safe, says Dr. Slater. □

DEAN'S HONORS DAY ANSWERS TO QUESTIONS FROM PAGE 6:

TAILOR AND INVENTOR

Prof. Stephen Benjamin Colvin, M.D.
 HONOR: Promotion to Professor, appointments as the Seymour Cohn Professor of Cardiothoracic Surgery and as the first Chairman of the Department of Cardiothoracic Surgery.

MASTER BICYCLIST OF MANHATTAN'S MEAN STREETS

Prof. James Anthony Borowiec, Ph.D.
 HONOR: Promotion to Professor of Biochemistry.

PHOTOGRAPHER OF SCENERY AND CELLS

Prof. Grace Chia-yu Hsu Yang, M.D.
 HONOR: Promotion to Professor of Pathology.

SAXOPHONIST

Prof. Court Baldwin Cutting, M.D.
 HONOR: Promotion to Professor of Surgery.

RED SOX FAN

Prof. Mark Stefan Hochberg, M.D.
 HONOR: Appointment as Professor of Surgery.

FANATICAL SHOPPER

Prof. Judith Terry Zelikoff, Ph.D.
 HONOR: Promotion to Professor of Environmental Medicine.

BLACK BELT IN THE 5000-YEAR-OLD ART OF SHORINJI KEMPO

Prof. Evgeny A. Nudler, Ph.D.
 HONOR: Promotion to Professor of Biochemistry.

HONORS, AWARDS & PROMOTIONS

WILLIAM L. CARROLL, M.D.

William L. Carroll, M.D., the Julie and Edward J. Minskoff Professor of Pediatrics and Director, Stephen D. Hassenfeld Children's Center for Cancer and Blood Disorders, has been promoted to Deputy Director of Clinical Research at the NYU Cancer Institute. Dr. Carroll sits on the NCI Subcommittee A—Cancer Centers. He is a nationally recognized translational researcher in the field of pediatric leukemias, and he directs clinical trials in acute lymphoblastic leukemia, the most common childhood cancer, for the Children's Oncology Group.

Prior to joining NYU, Dr. Carroll was the Deputy Director of the Huntsman Cancer Center at the University of Utah School of Medicine. He earned an M.D. from the University of California, Irvine, College of Medicine and completed his pediatric residency at the Children's Hospital Medical Center in Cincinnati.

KIMBERLY GLASSMAN, M.A., R.N.

Kimberly Glassman, M.A., R.N., has been appointed Vice President of Nursing Operations for NYU Hospitals Center. Glassman began her nursing career as a diploma graduate of the Massachusetts General Hospital School of Nursing in Boston. She completed her B.S.N. at Hunter College and her M.A. in Nursing Administration at NYU, where she expects to graduate with her Ph.D. in Research and Theory Development in Nursing in 2006.

After joining NYU as a staff nurse in the ICU, she rose to Head Nurse in the CCU/MICU. She was promoted to Clinical Director of Medicine, Director of the Cooperative Care Program, the first Director of the Case Management and Clinical Pathway Program (later the Director of Care Management), and the first Director of Nursing for Oncology Services. Glassman is intimately involved in patient and family education, from her experiences in Cooperative Care to the advanced programs now being introduced for cancer patients. A scientific member of the Institutional Board of Research Associates in the School of Medicine, she has helped to strengthen the role of research nurses at the NYU Cancer Institute.

PATRICK J. KELLY, M.D., F.A.C.S.

Patrick J. Kelly, M.D., F.A.C.S., the Joseph Ransohoff Professor of Neurosurgery and Chairman of the Department of Neurosurgery, was awarded the Spiegel and Wycis Medal by the World Society for Stereotactic and Functional Neurosurgery. The award is presented once every four years to senior neurosurgeons who have made significant contributions to the field. Dr. Kelly was honored for his development of computer-assisted image-guided neurosurgery, which has been used at NYU since 1993. The award is named for two pioneering neurosurgeons, Earnest Spiegel and Henry Wycis, who in 1947 became the first to perform a human stereotactic neurosurgical operation.

SUSAN K. LOGAN, PH.D.

Susan K. Logan, Ph.D., Assistant Professor of Urology and Pharmacology, has been awarded a \$720,000 research scholar four-year grant from the American Cancer Society. Dr. Logan is using specialized antibodies to learn how the androgen receptor, a steroid hormone receptor that binds androgen within human cells, turns genes on or off in prostate cells, potentially leading to novel ways to inhibit prostate cancer cell growth.

LYNN D. ODELL, M.S.

Lynn D. Odell has been appointed Vice Dean for Communications and Public Affairs, NYU School of Medicine, and Vice President for Communications and Public Affairs, NYU Hospitals Center. She previously served as Interim Director of the Office of Communications and Public Affairs. These newly created positions reflect the strategic importance of communications, public affairs, marketing, and advertising at NYU Medical Center.

A 20-year veteran of the Medical Center, Odell will be responsible for both the day-to-day and long-range challenges and opportunities involved in developing and implementing communications strategies for press, publications, marketing, and public affairs operations. She will play a key role in guiding the Medical Center's publications—especially its flagship publications, *NYU Physician* and *News & Views*. Odell earned a B.S. in Education from Wheelock College and an M.S. in Administration from Pace University.

HARVEY PASS, M.D.

Harvey Pass, M.D., has been appointed Professor and Chief of the Division of Thoracic Surgery in the Department of Cardiothoracic Surgery and Director of the Thoracic Oncology Program at the NYU Cancer Institute. He will manage and develop the thoracic surgery program at Tisch Hospital, Bellevue Hospital, and the VA Hospital. Prior to joining NYU, Dr. Pass was Professor of Surgery and Oncology at Wayne State University School of Medicine and Chief of Thoracic Oncology at its Karmanos Cancer Institute. From 1986 to 1996, he was Senior Investigator and Head of Thoracic Oncology for the Surgery Branch of the National Cancer Institute in Bethesda, Md.

Dr. Pass received his M.D. from Duke University School of Medicine, and then completed surgical residencies at Duke, University of Mississippi Medical Center, and Medical University of South Carolina College of Medicine. Dr. Pass is internationally recognized for his work in the treatment of lung cancer and mesothelioma, and is on the board of directors of the Lung Cancer Alliance. He is Chairman of the Scientific Advisory Board of the Mesothelioma Applied Research Foundation.

DANIEL SHINE, M.D.

Daniel Shine, M.D., has been appointed to the full-time position of Chief of the Medical Service of Tisch Hospital. Prior to his arrival at NYU, Dr. Shine was Chairman of the Department of Medicine at Monmouth Medical Center, Long Branch, N.J., and Associate Professor of Medicine at Drexel University College of Medicine. Previously, he was Director of Medicine at Lincoln Medical and Mental Health Center, Bronx, N.Y., and Vice Chairman of the Department of Medicine at New York Medical College. A graduate of the Georgetown University School of Medicine, he did his residency training in Medicine at the University of Massachusetts Medical Center. Dr. Shine earned two fellowships: one in Clinical Pharmacology at Harvard and one in Medicine at The Peter Bent Brigham Hospital in Boston.

MICHAEL WEITZMAN, M.D.

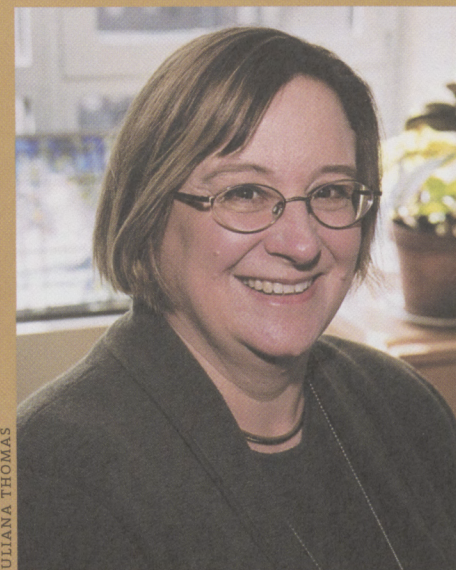
Michael Weitzman, M.D., has been appointed Chairman of the Department of Pediatrics, effective January 1, 2006. He will also hold the title of the Pat and John Rosenwald Professor of Pediatrics. Dr. Weitzman replaces Benard P. Dreyer, M.D., Professor of Pediatrics, who served as Interim Chairman.

One of our nation's foremost pediatricians, Dr. Weitzman is widely respected for his tireless work to protect children against such environmental hazards as second-hand smoke and lead exposure. He comes to NYU from the University of Rochester School of Medicine and Dentistry, where he was Professor of Community and Preventive Medicine and of Pediatrics, and Director of the Division of General Pediatrics, and Pediatrician in Chief at Rochester General Hospital.

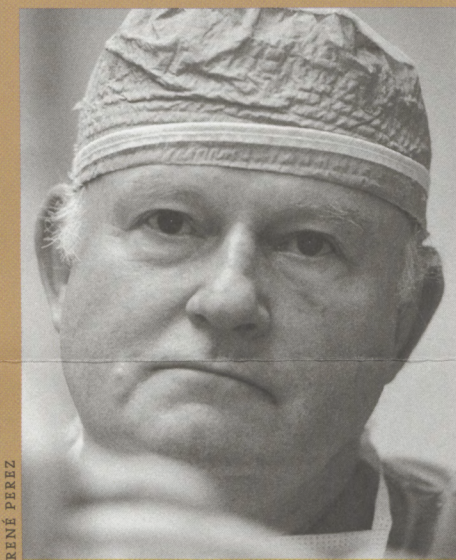
Dr. Weitzman earned his medical degree from the State University of New York, Upstate University College of Medicine, in Syracuse. He remained at SUNY Upstate for his internship and residency (in pediatrics), ultimately serving as chief resident. A prolific researcher, he is Executive Director of the Center for Child Health Research, a national research institute created by the American Academy of Pediatrics and located at the University of Rochester.



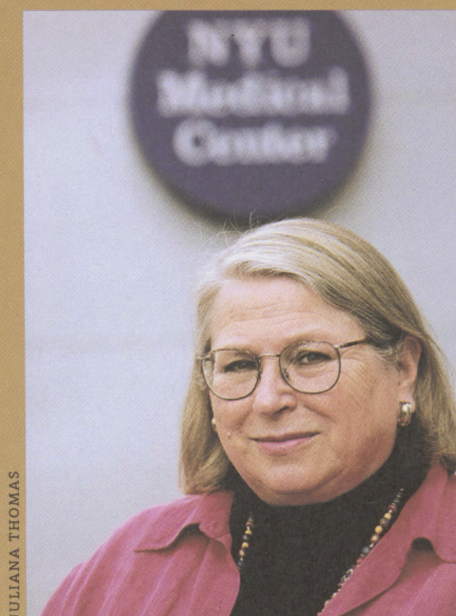
William L. Carroll, M.D.



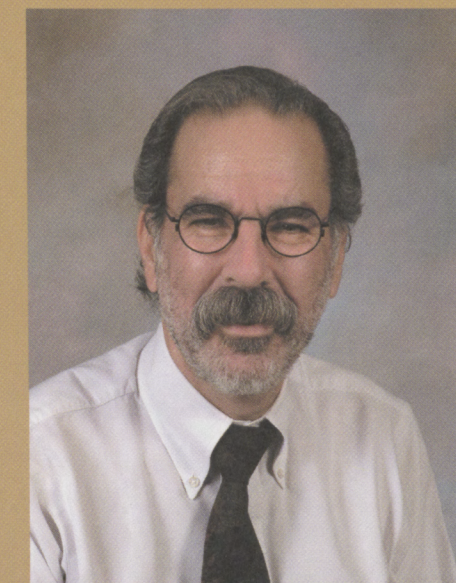
Kimberly Glassman, M.A., R.N.



Patrick J. Kelly, M.D.



Lynn D. Odell, M.S.



Michael Weitzman, M.D.

Joan and Joel Smilow Research Center Almost Ready for Its Housewarming Party

The idea, born in 1998, of creating a state-of-the-art building devoted to translational research at NYU Medical Center has been converted into a strikingly modern reality.

The Joan and Joel Smilow Research Center, a 13-story glass-and-masonry tower near the corner of 30th Street and the FDR Drive, is now getting its finishing touches. Gracing Manhattan's eastern skyline, the building is destined to serve, in the words of Dean and CEO Robert M. Glickman, M.D., as "the centerpiece of our plans to fortify our leadership in medical research in the 21st century." Early in 2006 its 230,000 square feet will become home to more than 40 research groups.

"We developed the architecture to respond to the interdisciplinary research concept envisioned for the building," says Vicki Match Suna, AIA, Associate Dean for Real Estate and Strategic Capital Initiatives. A key design feature of the building is its open-plan laboratory space, with lab bench areas no longer separated from one another by walls or doors.

The architecture is "open and spectacular," says Steven J. Burakoff, M.D., Director of the NYU Cancer Institute and Director of the Skirball Institute of Biomolecular Medicine.

"The layout is intended to help foster interactions and allow laboratories to be expanded and contracted." Lab space can be reshaped when the size of a lab group changes or when equipment is added. For example, supply cabinets can easily be moved to different locations in the lab because their design is modular.

Facilities for tissue culture, microscopy, fume hood alcoves, or cold rooms, are at the center of each floor, with, in Dr. Burakoff's words, "a kind of racetrack" of lab space around it. Given the growing technology needs of lab groups, these rooms allow researchers to share increasingly expensive equipment. Outfitted with such features as electrical outlets of varying voltages, these areas also help accommodate new equipment requirements. "This design allows us to respond effectively to the changing landscape of scientific research," says Dean Match Suna.

The spirit of collaboration extends beyond the labs. On the ground floor overlooking the new courtyard is a little café calculated to nurture that spirit. "You need to make inviting spaces where people want to go," says Dean Match Suna. "Informal discussions give a sense of community and foster collegiality," adds Dr. Burakoff, especially for younger staff such as postdoctoral scientists and junior researchers.

Opening ceremonies for the Smilow Research Center are scheduled for May 25, and a symposium on "Science in New York City" will be held at the center on the preceding day. □



Open-plan labs in the Smilow Research Center are set up to foster interaction between researchers.

BERNSTEIN ASSOCIATES PHOTOGRAPHERS

Thanks to VA, Vets Can Walk Tall

To watch Garth Stewart sprinting up and down the hall of the Manhattan VA Medical Center's 14th Floor Prosthetics Center, you would never know that he's missing the lower portion of his left leg. And to hear him talk about the loss, you would never know that he cares. "I consider it a superficial injury," says the 23-year-old native of Stillwater, Minn., who was discharged from the Army in 2004. "There's nothing I can't do, and I can even outrun most of my friends. It's a sacrifice I gladly made for my country."

One month after the invasion of Iraq, Garth (shown in photo) stepped on a land mine on the outskirts of Baghdad. Though the explosion claimed only his big toe, infections required a series of amputations that finally ended seven inches below his left knee. The high-tech prosthesis made for him actually enables him to pivot while he's working out on a punching bag.

Garth, whose parents are former marines and whose brother is in the Navy, is one of some 340 amputees and thousands of injured vets who have returned from recent conflicts. Facilities like the Manhattan VA provide them with as much moral support as medical care and physical rehabilitation.

Like many of his fellow vets, Garth came to the Prosthetic Center—one of six VA-designated Centers of Excellence—to have his artificial limb fine-tuned to suit his athletic lifestyle. Once Garth notified the VA's prosthetists which day he would be arriving to begin classes at Columbia University, they worked hard to have his limb ready on time and introduced him to a local Prosthetic Support Group.

"This is a very special place," says Nicole Sasson, M.D., Chief of the Physical Medicine and Rehabilitation Service at the VA. "We're able to give these vets state-of-the-art prostheses that they probably wouldn't be able to afford in the private sector." □

What Will Become of the Manhattan VA?

As part of a proposed realignment by the U.S. Department of Veterans Affairs, the Manhattan VA, a longtime affiliate of the School of Medicine, has been targeted for possible closure. NYU Medical Center has expressed support for three options that would maintain most or all services at both of the VA's Manhattan and Brooklyn healthcare campuses. Other options under consideration would involve closing one or both of the campuses that together constitute the Department of Veterans Affairs New York Harbor Healthcare System.

"We believe closing either the Manhattan or Brooklyn VA campus would be incompatible with access and quality of care," said Robert M. Glickman, M.D., Dean and CEO of NYU Medical Center. "It would be impossible to replicate many key programs on each campus except at enormous cost." That amount has been estimated at upwards of \$600 million. There are 1.3 million veterans residing in the New York metropolitan area.

"This is an important time for our country to show support for the troops by ensuring them high-quality and accessible healthcare when they return home," the Dean added. The final decision regarding the fate of the local campuses is expected in late winter. Details of the VA's options, as well as a link for public comments, are available online at www.va.gov/cares. □



RENÉ PEREZ

● IN THE NEWS

Bird Fever

As the bird flu virus, known as H5N1, spreads across Asia and Europe, health officials are growing increasingly concerned that the virus could mutate and cause a pandemic. Dr. Martin J. Blaser, Chairman of the Department of Medicine and President of the Infectious Diseases Society of America, recently discussed the threat with *News & Views*.

Is there likely to be a pandemic?

We just don't know. As long as the virus stays in birds, it isn't a problem. The real risk is whether it goes into humans, and if humans can transmit it to humans. So far, there have been some cases of bird flu in humans, mostly involving people working in the poultry industry, but basically there hasn't been human-to-human transmission. The problem is that probably one day it will transmit, and we don't know when. So what we need to do is to prepare. We need to develop new vaccines and new drugs, stockpile existing materials, prepare public health procedures and surveillance.

What's the best line of defense?

Ultimately the first line of defense will be to have a better ecology of chicken production. It is very foolish to have chicken farms with millions of chickens next to one another because it is a breeding ground for infectious diseases like avian flu. The second is to have effective and timely vaccines. Right now we have neither. We have to get them and scale them up sooner, and then manufacture and distribute them quickly. We also need better treatments. Our treatments are limited, and resistance will predictably emerge, indeed has already emerged. How serious is this? We don't know.

The bottom line is that we would be foolish to ignore all the warning signs. The threat is real. There is no need to panic, but we need to be prepared. □