Post-September
A Memorial in Lights
and Service

INSIDE:
• BRAIN IMAGING
• RARE DISEASES
• RESIDENTS ON (HOUSE) CALL
Chairman, Editorial Board
Thomas Q. Morris, M.D.
Vice President for Health Sciences and
Vice Dean for Clinical Affairs

Editor
Bonita Eaton Enochs
Assistant Vice President, External Relations
Director of Publications

Science Writer/Editor
Robin Eisner

Contributing Writers
Leslie Boen
Nicholas Christy, M.D.
Susan Conova
Richard Kessin, Ph.D.
Jack Lucentini
Aileen Moroney

Assistant to the Editor
Angela Muniz

Alumni News Editor
Marianne Wolff, M.D.

Alumni Writer
Peter Wortsman

Designer
Howard Roberts
HRoberts Design

Editorial Board
Rita Charon, M.D.
Gerald D. Fischbach, M.D.
Kenneth Fordie, M.D.
Bruce Forester, M.D.
Oscar Garfein, M.D.
Leonard C. Harber, M.D.
Edgar Housepian, M.D.
Georgiana Jagiello, M.D.
Tim Jancelewicz'03
Jeremy Keenan'03
Jonathan LaPook, M.D.
Jay Lefkowitch, M.D.
Stephen E. Novak
Carmen Ortiz-Neu, M.D.
Soo Mi Park'03
John Schullinger, M.D.
Joseph Tenenbaum, M.D.
John Truman, M.D.
David Walker'02

P&S is published three times a year for alumni, faculty, students, and other supporters of the College of Physicians & Surgeons. It is published by the college and the P&S Alumni Association through the Office of External Relations.

Address correspondence to:
P&S Editor
College of Physicians & Surgeons
630 W 168th St.
New York, NY 10032

E-mail: psjournal@columbia.edu

Alumni should update their addresses by writing the Alumni Association at the address above or calling the alumni office at (212) 305-1454.

Faculty should contact their departmental administrators to update their addresses, which are obtained through the Columbia University personnel system.

Others with questions about the mailing list may contact the Office of External Relations at (212) 305-3877.

P&S is printed on recycled paper.

In This Issue

2 Faculty Remembered: Harold Brown, 1902-1988

4 Research Reports
- Turning the immune response on and off
- What keeps the nervous system intact?
- Researchers find most short-term memory loss in seniors is normal
- Antidepressant use rises as psychotherapy declines
- Osteoporosis remains underdiagnosed
- Beta blockers correct defect in failing hearts
- Low doses of radiation in nature may pose more risk than previously thought
- Cryotherapy effective in treating local recurrent prostate cancer
- The hope: to cure diabetes with cell transplants

7 Clinical Advances
- Treating heartburn with heat
- Imaging center to expand Columbia’s brain research capabilities

11 A New Sense of Community: Columbia Responds to Sept. 11 Attacks
Four individuals with ties to Columbia—an alumnus who treated Pentagon burn victims, an Argentinian physician working on an Alzheimer’s disease research project, a Mailman School of Public Health administrator who’s also a paramedic, and an alumnus with an ophthalmology practice in downtown Manhattan—lent their skills on Sept. 11. And an alumnus in California is not surprised by Columbia’s response.

17 Being One in a Million
When a disease afflicts fewer than 200,000 people in the United States, it’s labeled rare. But that distinction only amplifies the suffering of patients and their families. Several P&S researchers study so-called rare diseases, offering hope to many.

23 Home is Where the Residents Visit
Internal medicine residents interested in primary care make house calls to improve their relationships with patients and, in some cases, the care itself.

27 P&S Students
Students learn about mental illness from people who live it.

29 Graduate School Life

31 P&S News

33 In Memoriam
Faculty and alumni who have died

37 Alumni Section
Profile: Jonathan Newmark ’78
Crossword puzzle: Germane?

ON THE COVER: Memorial lights replace the two towers of the World Trade Center in Lower Manhattan. Photo by Charles Manley.
The time is October 1943. The United States is in its second year of World War II. The New York Times and the New York Herald Tribune report the arrival at P&S of Dr. Harold W. Brown. Both papers describe “a professorship in parasitology, marking the beginning of a new program in tropical medicine at the Columbia-Presbyterian Medical Center... announced yesterday by Dr. Willard C. Rappleye, dean of the College of P&S of Columbia University... Dr. Brown is the first member of a faculty for training and research in tropical diseases... under the DeLamar Institute of Public Health, a division of the Medical School.” The articles go on to say that Columbia has received a grant from the Josiah Macy Jr. Foundation for this program.

From these short news items you can draw several inferences. It comes as a surprise that parasitology came so late to a major medical school, given that parasitic diseases afflict millions of people worldwide. Second, parasitology is placed within an institute under a division; that does not sound like a very central role for public health, which some sage has called “the great unknown giver of health.” Third, the fiscal support will come from outside of the University, suggesting a less-than-total institutional commitment to this field. Finally—but not reported in the newspapers—Professor Brown asked the curriculum committee for 68 hours of class time for his new course. He was given half that.

HAROLD W. BROWN 1902-1988

This series, Faculty Remembered, features profiles of former faculty members at P&S. The author of the series is a 1951 P&S graduate and former professor of medicine. He is now special lecturer in medicine and writer-in-residence at P&S.
Despite these limitations, Dr. Brown, with energy and efficiency seemingly limitless, made great changes and, in his nearly 30 years in New York, took Columbia out into the world.

Not a northeastern establishment figure, Harold Brown was born in Muskegon, Mich., and took his A.B. degree from Kalamazoo College in 1924, receiving advanced degrees in zoology, parasitology, and epidemiology from Kansas State, Johns Hopkins, the London School of Tropical Medicine, and Harvard (1924-1936). Obtaining his M.D. from Vanderbilt (1933), he worked in pharmacology and the rural South (sometimes on horseback) on new drugs for hookworm. After gaining experience in malaria, he served at Chapel Hill and Duke, with the rank of full professor despite his youth, until 1943, when P&S had the wisdom to recruit him.

From then until “retiring” in 1970, he engaged vigorously and effectively in a whirlwind of activities. Although not primarily interested in research, he produced many papers on the chemotherapy of roundworm diseases and hard-to-treat filariasis. Later, his interests became more and more outward and more public as he circled the globe three times a year. In Puerto Rico, he transformed the Institute of Tropical Medicine into a full-fledged medical school and played a major part in organizing the medical schools of Taiwan, Ethiopia, Haiti, Java, and Malaysia.

At P&S, he is best remembered for establishing in 1950 a fourth-year elective, Medicine in the Tropics. Dr. Brown would arrange externships in exotic places, raise the necessary travel funds, and send senior students abroad for two-month periods. One of the first fellows was Baruch Blumberg’51 who studied parasitic diseases in Surinam, unearthing there the first hints—that different people respond differently to the same pathogen—that led to his later discovery of Australia antigen and, hence, to vaccination against hepatitis B. In 1970, Dr. Brown’s official retirement date from Columbia, 40 fourth-year medical students were pursuing fellowships in South America, Korea, Taiwan, Thailand, and Africa. By now, the overall number of engaged students is in the hundreds. These alumni and others have enthusiastically perpetuated Dr. Brown’s memory at P&S. They tried (unsuccessfully) to persuade the college to retain the professor on the faculty after the customary retirement age (65); they stimulated and supported a portrait of him for Bard Hall; they dedicated a P&S yearbook to him; and they prompted the construction of a residence hall for visiting students in Liberia, naming it after him.

Everyone asks, How did he do all he did? The quick answer is his humor. Humor implies balance, not taking yourself too seriously. This professor, one primarily devoted to teaching, maintained a steady good humor but at the same time he was all business, no wasted motion. His good cheer deluded us second-year students embarking on his popular course in parasitology. He gave almost all the lectures himself. We thought it would be all fun. Until the first quiz. Hard. Painfully specific. Exacting. Excruciating. Then, we began to study. Hard, just to get by. But always Dr. Brown’s saving humor made it all bearable; the exotic quality of the facts rendered it fascinating. One example from his didactic writing (he used it more than once): “Although this parasite [Enterobius vermicularis, the pinworm which causes notable pruritus ani] is more prevalent in the lower economic groups, mental institutions, and orphanages, it is not uncommon in the well-to-do and even in the seats of the mighty.”

After his official retirement, Dr. Brown took up serious farming in Hopkins County, Ky. He continued, at a slower pace, his travels in the cause of public health, e.g., for WHO, and found time to give short courses in parasitology at Dartmouth, Mount Sinai, Vanderbilt, and Meharry Medical School.

It might not be too much to say that Harold Brown was a true hero in public health. He died in 1988, but not until he had taken Columbia to the world and brought the world to Columbia.

Author’s Note: The writer is thankful to Dickson D. Despommier, professor of microbiology and public health, who gave much helpful information and illuminating comment.
**Turning the Immune Response On and Off**

Scientists have identified a key pair of molecules that could help clinicians modulate the immune response, a finding that could help improve transplantation and the treatment of other diseases. The findings were reported in the February issue of Nature Immunology.

Led by Dr. Nicole Suciu-Foca, professor of clinical pathology, the researchers provide evidence that increasing the amount of the molecules ILT3 and ILT4 on specific immune cells (called dendritic cells) could create tolerance to foreign tissues, such as donor tissue or bone marrow. Their results also suggest that somehow decreasing the amount of ILT3 and ILT4 on these cells might allow the body to better fight AIDS and cancer.

**What Keeps the Nervous System Intact?**

A new study from researchers at Columbia and Albert Einstein College of Medicine describes for the first time compounds needed to sustain the architecture of nerve cell projections, called axons.

Led by Dr. Oliver Hobert, assistant professor of biochemistry and molecular biophysics, the investigators identified in an animal model (the nematode C. elegans) a family of six proteins, called zigs, that sustains axons in anatomical place. Dr. Hobert is now seeking the receptors on axons that respond to zigs, so named because they have two (z)—German for two—is zwei—immunoglobin-like (ig) regions. Humans have similarly shaped proteins, which presumably have analogous function. The research was published in the Jan. 25 issue of Science.

**Researchers Use fMRI to Identify Normal Memory Loss vs. Dementia**

Elderly people who have memory problems often worry they will develop Alzheimer’s disease. But a new study by Columbia researchers suggests functional MRI can distinguish between seniors with normal memory loss and those who probably will develop dementia.

Using fMRI to detect dysfunctional brain regions, the investigators found 25 percent of the 30 seniors in the study are at risk for Alzheimer’s disease. The researchers are monitoring the study participants and performing additional studies to determine if fMRI could be used in the early diagnosis of Alzheimer’s. Dr. Scott Small, assistant professor of neurology in Columbia’s Taub Institute on Alzheimer’s Disease and the Aging Brain, led the study. The findings were published online Jan. 18 in the Annals of Neurology.

**Antidepressant Use Rises as Psychotherapy Declines**

The proportion of Americans taking antidepressants for the treatment of depression in an outpatient setting increased more than six-fold during the period between 1987 and 1997, according an a study led by Dr. Mark Olfson, associate professor of clinical psychiatry. Researchers compared trends in outpatient treatment of depressive disorders in the United States in 1987 and 1997, analyzing data from two nationally representative surveys of the U.S. general population.

The proportion of patients seeking treatment for depression and the proportion of people getting antidepressants for depression increased between 1987 and 1997, the researchers found. The authors report that the rate of outpatient treatment for depression almost tripled in that time, from 0.73 to 2.33 per 100 persons. In addition, the proportion of individuals in outpatient treatment who used antidepressant medications for depression almost doubled from 37.3 percent to 74.5 percent, while the proportion receiving psychotherapy declined (71.1 percent vs. 60.2 percent). The findings were published in the Jan. 9 issue of JAMA.
OSTEOPOROSIS REMAINS UNDERDIAGNOSED

More women should be getting tested for osteoporosis, a devastating bone disease that can lead to debilitating fractures, according to results from the largest U.S. study of osteoporosis risk factors, which was led by Columbia physician Ethel Siris. The study of more than 200,000 women from 34 states found that almost half of women over 50 who visit primary care doctors in the United States are at some risk for osteoporosis. The women had been patients of more than 4,000 primary care doctors between Fall 1997 and Spring 1999.

“Despite excellent diagnostic tools and safe therapies, osteoporosis and low bone density remain underdiagnosed,” says Dr. Siris, the Madeline C. Stabile Professor of Clinical Medicine. The findings were published in the Dec. 12, 2001, issue of JAMA.

BETA BLOCKERS CORRECT DEFECT IN FAILING HEARTS

Researchers have shown for the first time that beta blockers can correct a specific defect in failing hearts. The findings were published in the Dec. 4, 2001, issue of Circulation.

The researchers, led by principal investigator Dr. Andrew Marks, the Clyde and Helen Wu Professor of Molecular Cardiology, found that defects in the calcium channels controlling heart muscle function occur in heart failure. In a normally functioning heart, the organ’s calcium channels are stimulated by electrical impulses driving heart rhythm and interact to release calcium ions. These, in turn, signal the heart muscle to contract. In heart failure, this process is subverted because the calcium channel responsible for the actual discharge of calcium ions—known as the ryanodine receptor—is excessively phosphorylated. This renders the ryanodine receptor unable to answer signals from the nervous system that call for the release of more calcium ions, undermining the heart muscle’s ability to contract with the strength needed to pump blood throughout the body. The researchers found that beta blockers can prevent excess phosphorylation of the ryanodine receptor, helping restore the heart to more normalized activity.

LOW DOES OF RADIATION IN NATURE MAY POSE MORE RISK THAN PREVIOUSLY THOUGHT

Radiation can trigger widespread mutations in living cells at much lower doses than scientists previously believed, according to findings from a study by Columbia researchers. The research may help public health officials reexamine which levels of radiation in nature should be deemed safe.

Led by Dr. Tom K. Hei, professor of radiation oncology and public health, the study found that a dose that strikes as few as one in 10 cells has nearly the same mutagenic effect as a dose that strikes every cell. The added damage occurs, the researchers say, because of what is called the “bystander effect,” in which injured cells send aberrant signals to neighboring cells. The study was published in the Dec. 4, 2001, issue of the Proceedings of the National Academy of Science.

CRYOTHERAPY EFFECTIVE IN TREATING LOCAL RECURRENT PROSTATE CANCER

Half of men treated with radiation therapy—such as external beam, seed implants, or both—for prostate cancer develop a recurrence of the disease in the gland. Physicians traditionally have treated the recurrence by either removing the prostate or by providing hormones to suppress cancer cell growth. But surgery can create incontinence and rectal injury. Hormones are not curative; they only keep the disease in check.

Led by Dr. Aaron Katz, associate professor of clinical urology, urologists report success with cryotherapy, a method that freezes the prostate tissue to kill cancer cells, for the treatment of localized recurrent prostate cancer. In the October 2001 Journal of Urology, the physicians found that recurrence-free survival, as measured by low PSA levels, was 86 percent at one year and 74 percent at two years in 38 men treated with cryotherapy between October 1997 and September 2000. Side effects included sexual dysfunction and, in a few cases, incontinence.
A new Islet Cell Resource Center at Columbia hopes to change the lives of diabetics by providing a new therapy that will allow patients to produce insulin, making daily injections obsolete. Insulin therapy has been successful in transforming type I diabetes from a fatal childhood disease into a chronic, manageable life-long disorder, but diabetics still suffer from life-threatening complications.

Islet cell transplantation replaces the insulin-producing cells that are destroyed by the disease. Islets are bundles of 50 to 1,000 pancreatic cells, which include the insulin-producing beta cells and other cell types.

Dr. Mark Hardy, the Auchincloss Professor of Surgery, who directs the center with Dr. Kevan Herold, associate professor of clinical medicine, says the Columbia center will be the New York City region’s islet cell resource, responsible for collecting donor cells, distributing them to researchers, and performing transplants. Nine other centers, jointly funded by the NIH and the Juvenile Diabetes Research Foundation, are located throughout the country.

Each center develops certain specialty areas and interacts with other centers to increase islet yield, quality, and distribution, says Dr. Hardy. The Columbia center will develop very quick methods to preserve islets and determine islet quality before the cells are transplanted into a patient. The technique also should help increase the yield of high-quality cells.

The concept of islet cell transplantation sounds simple: Remove islets from a donor pancreas and transplant them into a patient’s liver, where a rich blood supply nourishes the cells. Transplants generally didn’t work until two years ago, when Canadian researchers used a cocktail of newer immunosuppressive drugs and increased the number of injected islets.

Isolating “happy” islet bundles, however, is tricky, says Dr. Eric Liu, a research fellow with the center and resident in surgery. The islets come from the pancreas of a deceased donor and the tissues are oxygen-starved. The isolation process kills many islets, compounding the problem created by limited numbers of donated organs. The process begins by injecting the pancreas with digestive enzymes and then shaking and heating the organ until the tissue breaks apart into a slurry of cells. But if the shaking and baking is too rigorous, islets fall apart. Individual islet cells are useless for transplantation, as the cells cannot survive outside the islet milieu.

Given the trauma islets undergo during isolation, researchers fear the process may yield islets of varying quality. Their goal is to ensure that only high-quality islets are used in transplantation. To determine what makes a high-quality islet, Dr. Paul Harris, research scientist in medicine, and Dr. Charles Hesdorffer, associate professor of clinical medicine, are monitoring the expression of many different proteins in the islet cells with DNA microarrays and protein chips in collaboration with Dr. John Baust and collaborators at SUNY Binghamton. When transplants begin at Columbia, researchers will compare islets of successful and unsuccessful transplants to identify a specific signature in isolated islets that will help predict transplant success.
Burning tissue may seem a counterintuitive way to treat heartburn. But heat carefully applied via an endoscopically guided catheter to the valve region between the esophagus and the stomach helps bolster the valve and creates a better barrier against acid reflux.

The Food and Drug Administration in 2000 approved this heat method, called the Stretta procedure, to treat gastroesophageal reflux disease. Dr. Peter Stevens, assistant professor of clinical medicine, has performed the method on his patients for the past year. He was the first physician in the metropolitan area to use the procedure.

During digestion, swallowed food and liquids pass through the lower esophageal sphincter (LES) separating the stomach and the esophagus. The stomach produces acids and enzymes to break down the food. In gastroesophageal reflux disease, the sphincter is weakened and the acid flows backward into the esophagus, creating heartburn. Inflammation to the tissue can cause ulceration. As many as 13 percent of gastroesophageal reflux disease patients will develop Barrett’s epithelium, which can lead to cancer of the esophagus.

Drugs, such as proton pump inhibitors, reduce the stomach’s acidity and alleviate symptoms, but in some people the drugs fail to work or cause side effects. Others experience symptoms from the acid-free liquid bathing the esophagus and throat.

For patients who do not respond com-
pletely to medications or for those who respond well but do not wish to stay on medications because of side effects or other issues, doctors have performed laparoscopic and open surgeries that require a hospital stay. Stretta, however, is performed on an outpatient basis with the patient under conscious sedation.

During the procedure, which takes about 40 to 60 minutes, Dr. Stevens, who is also clinical chief and director of endoscopy in the division of digestive and liver diseases, passes a flexible catheter guided by endoscopic measurement through the mouth into the esophagus and positions it at the LES valve. The catheter places four small needles into the muscle of the LES and delivers radiofrequency to coagulate or heat the tissue to 85 degrees Celsius. Water delivered through ports in the catheter irrigates the surface tissue during treatment. The device monitors temperature readings to assure safety and control. Several parts of the LES and stomach get the heat treatment.

Stretta is not the first radiofrequency application in medicine. Cardiologists use radiofrequency on heart tissue to fix dangerous cardiac rhythms, and surgeons have used it since 1921.

Patients eat a liquid diet for the first 24 hours after the procedure and a soft diet for the next seven days. Eventually they are able to wean themselves from their medications. Several side effects are possible from the endoscopy and the Stretta procedure, including mild discomfort, tooth injury, esophageal perforation, and bleeding.

After eight weeks, the lesion resulting from the radiofrequency consists of collagen and fibroblasts. With wound healing, the lesion decreases in size, fibroblasts proliferate, and collagen deposits form, events that contribute to a less compliant or a stronger sphincter muscle. The treatment also disrupts the nerve pathways in the sphincter region, a result that also contributes to the sphincter becoming a better barrier. Studies have shown that nervous impulses mediate transient sphincter relaxations that lead to reflux.

A multicenter trial with 47 patients who underwent the Stretta procedure showed fewer gastroesophageal reflux disease symptoms, better quality of life scores, and improved pH tests. Seventy percent stopped taking medication. A 12-month follow-up study with 118 Stretta patients revealed that 60 percent stopped taking medications. Gastroenterologists are awaiting data from a randomized trial of Stretta vs. a sham procedure and from two-year follow-up studies.

“My patients have done very well in terms of getting off medications and enjoying their food and life better.”

“So far my patients have done very well after the Stretta procedure in terms of getting off medications and enjoying their food and life better,” Dr. Stevens says. “But I also am researching other techniques, such as suturing the sphincter region endoscopically, to continue progress in the field of endoscopic treatments for reflux and to ultimately provide the most comprehensive approach to my patients.”
Until about two decades ago, the idea that scientists could peer into the living, working brain was a fantasy bordering on science fiction.

Research into human brain function was largely limited to studying patients with neurological abnormalities resulting from focal lesions, such as stroke, tumor, or traumatic injury. By studying the effects of these lesions on behavior, some inferences could be made about normal functions of the brain areas involved. Such structure and function research gave a useful but quite approximate idea of the specialized areas of the brain that handle certain tasks. However, the organ’s finer workings remained a mystery. Furthermore, devastating brain conditions such as Alzheimer’s disease and schizophrenia often had mild or no changes that fully explained the clinical picture.

Today, several new imaging technologies allow scientists to watch the way activity of nerve cells change or how the brain metabolizes nutrients, processes that when measured give minute-to-minute information about the brain’s activities, even thoughts, at a detailed level.

Columbia researchers are using these technologies to leapfrog into a new era of brain research, with the creation of a state-of-the-art brain research imaging program funded in part by an $11 million New York state grant. Both normal and pathological behaviors will be subjects of inquiry.

The grant will let Columbia “exploit the unbelievable insights that can be achieved today using a variety of imaging techniques,” says Dr. Timothy A. Pedley, the Henry and Lucy Moses Professor and Chairman of Neurology. Dr. Pedley chairs the scientific and policy oversight committee that is guiding the new center, named the STAR Integrated Imaging Center after the New York Science, Technology and Academic Research (NYSTAR) grant program. The center is expected to open in phases between now and 2004.

The program will utilize a variety of imaging techniques including functional magnetic resonance imaging (fMRI), positron emission tomography (PET) scanning, and 2-photon microscopy, all of which highlight aspects of brain structure, function, and chemistry. The center’s programs will be carried out in newly renovated space in the Clinical Advances.

IMAGING CENTER EXPANDS COLUMBIA’S BRAIN RESEARCH CAPABILITIES

By Jack Lucentini

PET scans with radioligands that demonstrate the differences in locations of neuroreceptors.

The grant will let Columbia “exploit the unbelievable insights that can be achieved today using a variety of imaging techniques,” says Dr. Timothy A. Pedley, the Henry and Lucy Moses Professor and Chairman of Neurology. Dr. Pedley chairs the scientific and policy oversight committee that is guiding the new center, named the STAR Integrated Imaging Center after the New York Science, Technology and Academic Research (NYSTAR) grant program. The center is expected to open in phases between now and 2004.

The program will utilize a variety of imaging techniques including functional magnetic resonance imaging (fMRI), positron emission tomography (PET) scanning, and 2-photon microscopy, all of which highlight aspects of brain structure, function, and chemistry. The center’s programs will be carried out in newly renovated space in the Clinical Advances.

IMAGING CENTER EXPANDS COLUMBIA’S BRAIN RESEARCH CAPABILITIES

By Jack Lucentini

PET scans with radioligands that demonstrate the differences in locations of neuroreceptors.
basements of the Neurological Institute and the Mailman School of Public Health (in the former New York State Psychiatric Institute building) and in satellite sites at Columbia’s Health Sciences and Morningside campuses.

“The center will bring neuroscience research into an era of greater sophistication and objectivity.”

“The center will focus on translational research, which takes basic science findings into the clinic and brings questions and important clinical findings from the patient care setting back to the laboratory bench for further study,” says Dr. Philip Alderson, chairman of radiology and a major contributor to the competitive NYSTAR grant.

In recent years, researchers have developed animal models of such conditions as Alzheimer’s and Parkinson’s diseases. The imaging center will dramatically extend Columbia’s ability to investigate how these diseases progress in animals and humans, both at the microscopic level and in affected patients.

Another area of inquiry for the center is Dr. John Mann’s work on violence and suicide. Postmortem studies of suicide victims by Dr. Mann, professor of psychiatry and radiology, and colleagues have found consistently low levels of the neurotransmitter serotonin in the orbital prefrontal cortex, the brain region that lies behind the forehead above the eyes and regulates decision-making.

“We’ve now done some initial PET studies and found similar abnormalities in individuals who survive serious suicide attempts, abnormalities whose extent is proportional to the seriousness of the attempt,” says Dr. Mann. At the new center, researchers can investigate these findings in greater depth and evaluate treatments. “We can use much more specific PET imaging to identify the dysfunctional components of the serotonin system that regulate decision-making. Is it the input that’s abnormal? Or is it the receptors? The right treatment depends on the answer.”

Columbia has recruited several new scientists for the center. Dr. Truman Brown has joined Columbia as the Percy Kay and Vida L. Hudson Professor of Biomedical Engineering, professor of radiology, and director of MR research at P&S. He was formerly of the Fox Chase Cancer Center in Philadelphia. Dr. Joy Hirsch will join Columbia as professor of functional neuroradiology and head of a new fMRI program at the medical school. She is currently professor of neuroscience at Weill Medical College of Cornell University and head of the Sloan-Kettering Institute’s fMRI laboratory.

Dr. Brown will use advanced MR techniques to probe the responses of the brain to a variety of stimuli. A particular area of interest of his is to use MR spectroscopy to measure levels of neurotransmitters and other critical chemicals in the brain.

Dr. Hirsch uses fMRI to locate and map the functions of eloquent brain regions before patients undergo brain surgery. The method allows surgeons to avoid brain areas that control vital functions. “We’re really developing a whole new approach to assuring our patients that they’re going to be safe during surgery,” Dr. Hirsch says.

The center is expected to create jobs for more than 100 scientists, technicians, laboratory workers, and support staff. Staff members expect to collaborate with regional pharmaceutical and medical instrumentation industries. Imaging technology could help reduce drug development costs by millions of dollars as researchers discover new ways to objectively study both good and bad drug effects. Early phase drug studies often are subjective and follow a trial-and-error approach.

“The center will bring neuroscience research across the board into an era of greater sophistication and objectivity,” says Dr. Gerald Fischbach, executive vice president for health and biomedical sciences and dean of the Faculty of Medicine. “The ability to study the human brain non-invasively enables us to break through fundamental barriers in understanding memory, emotion, and the thinking process itself.”
The Sept. 11 attacks changed not only the world but the Columbia community as well. In the aftermath of a tragedy that killed 40 university alumni, Columbia has witnessed a new commitment to volunteerism and collaboration with the larger community, as staff, faculty, and students have worked to put New York back on its feet. The tragedies also introduced new priorities for research and study and focused the institution’s expertise and resources on helping to prevent terrorist attacks.

Students volunteered at ground zero and raised thousands of dollars to help attack victims. Faculty in nursing, medicine, public health, and dentistry offered their expertise to the relief effort. Psychiatrists and others at the New York State Psychiatric Institute continue to provide needed expertise. And the entire campus has remained on alert to respond to anthrax cases or other unusual events.

The help started within moments of the disaster. “Literally hundreds of doctors and nurses reported to the emergency department to offer their services” on Sept. 11, says Dr. James Giglio, assistant clinical professor of medicine and director of emergency medicine at Columbia-Presbyterian. “Well over 1,000 volunteers offered their services. Many of them were Columbia University undergrads and professional students.”

For these emergency workers, the pride of serving their community was mixed with sorrow at the scale of the losses and a sense of helplessness when few patients showed up.
“We received a trickle of injured patients,” Dr. Giglio says. “There was a slow, profound sense of sadness that set in and filled the void left where there were no patients to treat. Our own EMS workers returned from ground zero in a state of shock, knowing—long before the rest of us—the magnitude of the devastation and witnessing first-hand the deaths of so many victims.”

Dr. Mark Heath, assistant professor of anesthesiology, went to the site when the news struck and, following the advice of city officials, helped set up a temporary hospital at the Staten Island Ferry terminal.

“We were looking after about 20 people. There were broken arms, broken legs, a crushed pelvis, and bad lacerations,” he recalls.

Unlike doctors who wanted to help but found few that needed it, mental health workers have been overwhelmed with work following the attacks. Psychiatric faculty and staff at the New York State Psychiatric Institute developed a multifaceted response to the ensuing mental health issues. For example, Dr. Edward T. Kenny, assistant professor of clinical psychiatry, and colleagues formed a group of volunteer psychiatrists, Disaster Psychiatry Outreach, to help disaster victims. The group, founded in 1998, quickly went into action after Sept. 11. “We were still a small organization on Sept. 11,” says Dr. Kenny, a 1995 P&S graduate. The group coordinated an effort by roughly 700 psychiatrists to work with families of victims, police officers, and firefighters at ground zero and at the family assistance center. Other founders of Disaster Psychiatry Outreach were Craig Katz’95 and the late Lisa Chertkov’94. Dr. Katz, president of the group, “deserves the lion’s share of praise for its success,” says Dr. Kenny.

“In most psychiatric encounters, patients come to us. But here, we’re reaching out to people who may not be identifying themselves as psychiatric patients,” Dr. Kenny says. That’s especially important in situations where people are not inclined to seek help. “Typically, police and fire personnel are reluctant to seek psychiatric care. It’s not within their culture. We make an attempt to appeal to their altruism. We let them know we can offer them information, discussion of symptoms, and referral advice, in case their colleagues need help.”

The disaster also afforded some opportunities for research and scientific investigation that could help victims of tragedies. Dr. Frederica P. Perera, professor of public health, and colleagues have begun a three-year study on the effects of air pollution from the World Trade Center fires on pregnant women and their children downtown. “We are enrolling 300 women who reside and/or work in areas that had differing exposure to the pollutants,” she explains. By using biomarkers of exposure to such toxins as polycyclic aromatic hydrocarbons, PCBs, lead, and other metals to track the newborns’ exposure and health status, Dr. Perera and colleagues hope to provide a roadmap to understanding possible health problems related to such exposure. Non-exposed women will be studied for comparison. “It’s not a pure research study. Our intent is to provide a service to the women in the community,” Dr. Perera says. “This
type of event is unprecedented, and we have limited data to go on. The information we obtain in this study could be very useful in determining appropriate follow-up strategies.”

Dr. Regina Santella, professor of public health and director of the Mailman School’s Center for Environmental Health in Northern Manhattan, and colleagues also are studying air quality downtown. In collaboration with Johns Hopkins University, the center monitored the air breathed by Teamsters Union truck drivers at ground zero, using personal air monitoring devices worn by the drivers. In addition, specially designed high volume air samples were used to increase the sensitivity of area sampling for a wide range of exposures.

Columbia students also have done their part. Students who couldn’t help at a triage site near ground zero (see Winter 2002 issue) raised about $7,000 from the P&S community in the days following the disaster. P&S matched that sum, and the money went to the New York Times 9/11 Neediest Cases Fund. “I’d feel better if I had been allowed to help directly. Giving money is fairly removed. But it felt better than having done nothing,” says Amanda Stein, a second-year P&S student and one of the organizers of the fund-raising effort, Calvin Ma and Brock Macdonald, also second-year students, helped in the effort.

Far Away in Miles but Not in Spirit

On the morning of 9-11-01, I was on my way to work heading eastbound on the Artesia Freeway just before 6 a.m. Pacific time, with the dawn’s early light starkly outlining the San Bernardino Mountains to the north. NPR’s “Morning Edition” broke the news that a plane had just struck Tower 1 of the World Trade Center. I thought it was an accident at first, although the reports of clear skies made that theory seems unusual. I telephoned my parents in upstate New York on my cell phone, and they tuned into CNN in time to see the second plane hit Tower 2. As an anesthesiologist, I felt like I was working in disaster mode at work and I asked everyone I worked with if they had heard any new information. One woman who works in the office said she had relatives who worked in both the WTC and the Pentagon. I checked in with CNN in between cases, and at one point recognized Todd Wider, a surgeon and a P&S graduate, in a hard hat as he combed the streets of lower Manhattan looking for victims. A Columbia cardiac anesthesiologist working at the site was also featured. I knew that P&S students would be involved in the disaster relief efforts and to read in the winter issue of P&S that a student drove post-call from Bassett Hospital to the WTC site was not surprising. The physical proximity to the disaster must have had an additional impact for New Yorkers, but for me, the emotional impact was real. A constant reminder was the absence of jet noise from the skies near my house, which are usually full of planes. I enjoyed visiting the Tower 2 Observation Deck when I was at P&S, and I will visit ground zero the next time I travel to New York.

— John Cross’92
Manhattan Beach, Calif.
D.C. Alumnus Treats Burn Victims from Pentagon Attack

By Peter Wortsman

James C. Jeng ’86, a trauma and burn surgeon on call at Washington Hospital Center in Washington, D.C., had been up all night Sept. 10 in the OR. Exhausted and shocked by news of the attack on the World Trade Center in New York, he was surprised to hear himself paged.

“This has got to be some mistake,” he remembers muttering to himself before answering the page. “Dr. Jeng, get yourself down here on the double,” said the head nurse at the burn center, where he is associate director. “The nation’s capitol is under attack!”

A gulp and a pot of black coffee later, he was in the OR. “I had literally been up all night operating, and I knew I was in for a very, very long day. As it turned out, I operated for another 48 hours non-stop. It was,” he sums up after a pause, “very interesting.”

The Pentagon attack left 184 dead or missing. Eighteen patients showed up at the burn center, including the walking wounded. Some had burns covering up to 70 percent of their bodies.

A Navy reservist, Dr. Jeng gave his surgical all and was deeply moved by the comportment of his patients. He recalls one man in particular, a lieutenant colonel from Special Forces, with severe burns over much of his body. “Don’t worry about me,” he said, “go look after that patient across the way. He’s hurt worse.” President Bush came to check on the wounded. Another badly burned serviceman, who had been intubated and had his wrists restrained, “tried to pop off a salute to the president.”

Looking back, Dr. Jeng credits his P&S training for helping him get through it all in top form. “That morning of Sept. 11, I was so tired I just wanted to crawl into a hole and go to sleep. But P&S raised me to be a certain kind of doctor. There’s no formal course on compassion there, but the whole curriculum and everyone who teaches it just reeks of compassion—in the best way. I felt privileged to put my P&S training to the test. Of the 18 patients treated in our unit, we only lost one,” he reports with quiet pride. “The rest went home for Christmas.”
RESEARCHER HELPS WHERE SHE’S NEEDED

Alejandra Ciappa, a physician in her native Argentina, is at Columbia as a postdoc research scientist in the Institute for Cancer Genetics, working on an Alzheimer’s disease project.

On Sept. 11, she felt the need to go to ground zero to search for a friend who works near there and to volunteer her skills. Her friend is fine, and she volunteered with the Red Cross in several capacities from Sept. 12-14. Back in Argentina, Gente weekly magazine—similar to People magazine—featured her experience and named her one of the country’s personalities of the year. The government of Tandil, her hometown, passed a resolution recognizing her volunteer work in the days following Sept. 11.

In the first few days I had a hard time describing the situation. There was a lot of confusion. God wanted me there at that moment, and I needed to help.

People outside of ground zero knew more than I did because the television showed everything. But to breathe the air of horror was not the same. We did not know how many survivors there were, but we knew there were not many. The hope to find them was all there was.

On Sept. 11, I went to Chelsea Piers, and the doctors organized us into groups that included a surgeon, clinician, nurses, etc. From there they sent us to a triage center located at Stuyvesant High School. We took care of firemen, policemen, and volunteers who were removing the debris. Many respiratory and eyes problems were caused by the toxic smoke and particles. We also treated a lot of psychological trauma. Many of the volunteers found parts of bodies, bodies that were destroyed, unrecognizable. I listened to many testimonies, to much anguish.

I walked around, without being able to believe what I saw. I spent two months of my life with my sister, Jessica, in the summer of 1999 studying English at a school near the Twin Towers. We enjoyed lunches sitting by the fountain between the towers. We danced on the 107th floor, picnicked in a nearby park with friends, shopped in Century 21. I knew the area very well.

The weather while I volunteered at the site was similar—sunny and warm—but the image was one of devastation. I could not recognize the park, the towers were not there, and neither was the happiness in my heart.

The buildings around the towers still had people living in them, and I helped evacuate one of the buildings Sept. 11. This building was without light and water, 40 floors with terrified people who didn’t want to leave their homes and didn’t want to open the windows because they were afraid to breathe asbestos.

There were many volunteers working, and each one had a specific job, but each contribution was important and status was of no concern. I was a single grain of sand trying to be useful.

Somebody said to me Sept. 11, “God bless you helping my country.” I said to him, “I am not helping your country, we are helping humanity.” This tragedy does not have religious distinctions or borders. The people who were there were human beings from all over the world, spoke different languages, and were of different races.

—I Alejandra Ciappa, M.D.

I was a single grain of sand trying to be useful.
PARAMEDIC RUSHES TO THE SCENE

George W. Contreras, a New York City paramedic, is a program coordinator at the Mailman School of Public Health. He has worked in the EMS field since 1993. In addition to his full-time work at Columbia, he works as a paramedic at NYU Downtown Hospital, Lenox Hill Hospital, and St. Luke’s-Roosevelt Hospital. He is former director of EMS at St. Clare’s Hospital in Manhattan. While driving to his job at CPMC on Sept. 11, he heard a radio report about the first plane hitting the Towers and decided to respond.

Having worked at NYU Downtown Hospital for almost six years, I had responded to the WTC countless times for calls at the PATH trains, at windows on the World, at offices for the Port Authority, and other locations.

As I got out of my car, I looked at the clock in the dash—8:55 a.m. People were running all over the place. I never made it to the smoking building. As I approached, a security guard came out running and said that a woman was having a heart attack and I followed him into the lobby of the second tower. I remember thinking, “Well, at least this building is not on fire.”

Another firefighter brought a woman who was having an asthma attack and could not walk any more. I quickly set up the nebulizer and sat her down. As she was breathing in the medicine, I was thrown to the ground by a large rumble and what I thought was an explosion.

A firefighter ran into the lobby and made a general announcement: “The tower is leaning and the building is going to collapse. You have to get out now!” I immediately grabbed the woman and we walked through the lobby.

People were running away from the building. I looked up and saw a large black cloud that looked like it was coming over me. Pieces of metal and concrete were falling everywhere. As we scurried into the lobby of another building, we were all thrown to the ground. It was like a strong—and I mean strong—wind had just slammed us down. We all stayed on the ground as the thick smoke poured through the lobby and the rumbling continued. And then there was silence. It was totally dark except for the occasional gleam of light from the helmets of firefighters. We could not breathe, but we were alive. We stayed on the ground for what seemed like a long time, through a constant stream of explosions and rumbling. We finally got up and worked our way to the basement. When the firefighters dug a way out through another street, we climbed our way out into darkness and smoke. I looked in awe toward the spot where WTC once stood. No more buildings, only a large pile of concrete and twisted metal. We walked toward where I knew the hospital was. It was snowing, but it was not snow. It was grayish stuff. Those few blocks seemed like a mile and when I finally stumbled into the ER at NYU Downtown Hospital I saw my paramedic supervisor standing in full personal protective equipment.

I worked at NYU Downtown Hospital for hours, then went to ground zero and volunteered some more. It would not be until days later that I would learn about the loss of many EMS people I knew and worked with.

— George Contreras

EYE CARE (AND MORE) AT GROUND ZERO

By Peter Wortsman

On the morning of Sept. 11, Emil W. Chynn’92 peered out of his Greenwich Village apartment to the harrowing distant spectacle of the World Trade Center in flames. A refractive eye surgeon in private practice, Dr. Chynn called the hospitals with which he is affiliated—New York Eye & Ear Infirmary and St. Vincent’s—only to find that they hadn’t received any victims. He immediately leaped into action, pulling together essential ophthalmic paraphernalia, including office supplies and the eye surgical kit he used on a surgical mission in India, and headed downtown on roller blades.

One of the first physicians on the scene, he teamed up with 12 other health-care workers, including an anesthesiologist, a trauma resident, and several nurses, and set up a triage site. “We initially put it in a Burger King, across the street from the WTC, because it was one of the full mostly intact buildings still with electricity and also had some water left in the ice machines.”

“Around 1 p.m.,” he recalls, “the dense smoke suddenly thinned, and we saw remnants of 2 World Trade Center directly for the first time. It was strange that people watching CNN in California knew that the towers had collapsed before many people on the scene, because the visibility was just too poor to know exactly what happened. All of us volunteers came to a standstill, realizing for the first time that very few victims of the attack would become available for treatment. By early evening, we had converted the Brooks Brothers shop in that building into the first morgue, as it became apparent that there were more bodies and body parts being extracted than live victims.”

Over the six days he volunteered at the site, Dr. Chynn and other medical volunteers treated hundreds of victims, mostly rescue workers with various ophthalmic complaints, including abraded corneas and corneal foreign bodies.

In the days and weeks after the attack, he helped coordinate some of the philanthropic efforts and during the month of October donated 50 percent of fees from his LASIK practice to World Trade Center charitable organizations of each patient’s choice.
They are not household words: Acromegaly, Cystinosis, Blepharophimosis, or fibrodysplasia ossificans progressiva. But when one hits home, a family’s life forever changes.

Each one is a “rare disease,” or a condition in which fewer than 200,000 people in the United States are affected. More common diseases, such as diabetes, affect millions of Americans.

A significant problem with rare diseases is that most U.S. physicians do not have the expertise to diagnose and treat them. Patients often go from doctor to doctor, getting misdiagnosed with more common ailments.
Even when the disorder is identified, few treatments exist. Although some 20 million people collectively in the United States have an estimated 6,000 rare diseases, research into the causes of many of them remains scant. And even if the underlying pathology is well characterized, treatment may be years away.

Scientific investigation of rare diseases poses many challenges. Both government and private research funding tends to go to more popular diseases, except when a major foundation with aggressive philanthropic efforts supports the research. Because the diseases are, indeed, rare, getting statistically valid information about the disease course in patients can be difficult. Without good scientific data, conclusions about treatments become difficult to make.

Yet even with the difficulties, researchers at P&S continue to study rare diseases. The mission of a tertiary care institution like Columbia-Presbyterian is to research and treat illnesses others cannot. Some Columbia investigators are interested in how the underlying mechanisms of rare diseases can help elucidate normal cellular biology. Others are more clinically oriented, trying to develop better diagnostic methods and treatments for individuals afflicted with diseases that have strange names.

DNA damage and the ataxia telangiectasia gene product

The laboratory of Dr. Jean Gautier, assistant professor of genetics and development (in dermatology), studies the mechanisms cells use to stop dividing when their DNA is damaged. Cells have evolved these pathways because broken DNA makes it difficult for a parent cell to give a copy of its genetic information to daughter cells.

Dr. Gautier is particularly interested in how cells stop dividing when they contain double-stranded breaks in DNA. He studies the gene for ataxia telangiectasia (ATM) because people who have the neurodegenerative disease are susceptible to cancer and highly sensitive to ionizing radiation, which can crack chromosomes into double-stranded DNA breaks. Understanding how the ATM gene functions gives him clues about how cells respond to such damage.

Affecting 1 in 100,000 Caucasians, ataxia telangiectasia is a very rare condition characterized by a severe lack of coordination, slurred speech, a compromised immune system, and a high incidence of cancer. The disease usually takes the life of affected individuals before they reach age 20.

Dr. Gautier studies how the ATM protein acts to stop cell division when DNA damage is present. He is now researching how the protein interacts with damaged DNA. He has found double-stranded DNA co-purifies with the ATM protein in a cell-free system, while circular DNA does not. ATM therefore interacts directly or indirectly with double-stranded breaks, he says. His laboratory is investigating what part of the broken DNA ends is responsible for ATM’s recognition of the nucleic acid.
Although Dr. Gautier acknowledges his research may not help clarify the neurodegenerative aspect of ataxia telangiectasia, his studies help answer basic questions about cell division biology and could someday help prevent cancers in affected patients and others.

**Making decisions about gender assignment with scant information**

A variety of rare conditions can cause a baby to be born with ambiguous genitals. Dr. Heino Meyer-Bahlburg, professor of clinical psychology in psychiatry, studies gender identity in such people, who may be raised as one sex although their chromosomal makeup indicates they are the opposite sex.

Among the rare intersexual conditions he studies is 46 XY cloacal exstrophy, a condition in which the genitals of a chromosomally male child are very deformed or absent due to a severe pelvic floor defect. The condition affects one in 300,000 live male births. In the past, children did not survive, but today surgeons can save the children, who are typically raised as females.

Even though they are raised as females, some grow up and decide to become men. In a recent study Dr. Meyer-Bahlburg conducted in collaboration with Dr. William Reiner and others at Johns Hopkins, the investigators found that seven of 14 children who had the condition and had surgery to become female decided to become male. Yet in another study in England of eight children, none of the girls switched.

Dr. Meyer-Bahlburg believes media attention paid to a case of a boy with a circumcision accident who was surgically changed into a female and then became a male might have influenced the children with the cloacal exstrophy in the United States. The U.S. study was done during the media coverage. But, he says, it is a challenge to formulate an evidence-based policy for gender assignment and related genital surgery when so few cases are available to do research and the results are in conflict.

Dr. Meyer-Bahlburg is working with the North American Task Force for Intersexuality to generate larger samples of patients for more definitive studies. He heads its Research Protocol Working Group to improve psychological assessment of these individuals.

**Getting closer to a treatment for Niemann Pick C Disease**

Ten years ago, few researchers investigated Niemann Pick C disease. This neurodegenerative disease, which kills most affected children in their teen years, causes a deterioration of the nervous systems because of a toxic accumulation of lipids, such as cholesterol and sphingolipids inside nerve cells. One affected child out of every 150,000 in the population was not sufficient motivation for any but these few investigators to study the disease.

Today, though, around 50 laboratories are studying the pathology of Niemann Pick C thanks to the Ara Parseghian Medical Research Foundation. In 1994, doctors at Columbia diagnosed the grandchil-
Dren of Ara Parseghian, the Notre Dame football coach, with the disorder and explained the limited understanding of the disease to the Parseghians. The family responded by establishing the foundation, which helped sponsor the research that led to the identification of the NPC-1 gene that causes most cases of the disease. A second gene, NPC-2, is associated with a small number of cases.

Two P&S researchers have strong ties with the foundation. Dr. Marc Patterson, professor of clinical neurology and clinical pediatrics, is a member of the foundation’s scientific advisory board and is beginning a clinical trial to test a drug, OGT918, manufactured by Oxford Glycosciences in England, to treat Niemann Pick C disease. The drug may have promise for Niemann Pick C because experimental studies have shown that it slows down the progression of disease in mouse models of Niemann Pick C and two related disorders, Tay-Sachs and Sandhoff’s disease. Also, patients with Gaucher’s disease, another storage disorder, showed benefits from OGT918. All four disorders share the common feature: accumulation of a certain type of lipid called sphingolipids within the lysosomal pathway. The drug acts to inhibit the synthesis of glycosphingolipids, so the burden of their accumulation is reduced. It is believed that the NPC-1 gene acts to traffic lipids, including glycosphingolipids and cholesterol, inside the cell.

The trial will enroll 30 children, 12 years old and older, and will evaluate the effectiveness of the drug when given for one year. But the challenge of the research is getting a good endpoint to measure to determine if an intervention is effective. Since Niemann Pick C is so rare, very little is known about its natural progression, Dr. Patterson says. The major marker he will follow in the trial is the speed with which patients are able to move their eyes back and forth horizontally. As the disease progresses, patients lose this ability.

Dr. Stephen Sturley, associate professor of human nutrition (in pediatrics and in the Institute of Human Nutrition), receives research support from the foundation. He studies how NPC-1 affects the transport of cholesterol in cells, using yeast as a model organism. Yeast has a primordial version of the human gene defective in Niemann Pick C patients. Dr. Sturley believes the gene product plays a primary role in yeast—and in humans—in the transport of sphingolipids in the cell and that cholesterol goes along for a sub-cellular “ride.” Precisely how the NPC-1 proteins allow the accretion of the two lipids inside cells is the focus of Dr. Sturley’s research.
A rare disease that isn’t a rare disease: Celiac disease

If it were up to Dr. Peter Green, clinical professor of medicine, American physicians would not consider celiac disease a rare disease. An inflammatory condition of the small intestine, celiac disease occurs when people eat wheat, barley, and rye. Sufferers experience bouts of diarrhea and intestinal pains. People are diagnosed with the condition if they have antibodies to wheat protein gluten and show characteristic villus atrophy with a biopsy.

The disease can emerge early in life or show up for the first time when someone is older. By avoiding gluten products in the diet, a sufferer can live a typical life, although people with celiac disease have an increased risk of getting cancer of the small intestine.

The estimate of celiac disease frequency in the American population is one in 4,600, but Dr. Green challenges that number, citing European data and some recent American studies that show celiac disease is more common than previously thought.

The misperception of the frequency of celiac disease can lead doctors not to diagnose it because they think it is a rare disease. “Usually they will diagnose it as irritable bowel syndrome,” Dr. Green says. The average length of time before diagnosis of celiac disease in the United States, according to a study of 1,612 patients by Dr. Green, was 11 years.

Dr. Green is engaged in research to help determine the prevalence of celiac disease in the American population. He also is trying to find the gene or genes that might be associated with the disorder.

Two rare disease gene identifications: primary pulmonary hypertension and a type of familial epilepsy with auditory hallucinations

Primary pulmonary hypertension is a rare progressive disease in which blood pressure in the pulmonary artery soars, severely affecting the functioning of the heart and lungs.

Dr. Jane H. Morse, professor emeritus of clinical medicine, did not set out to find the gene for primary pulmonary hypertension but she and her colleagues, Drs. James Knowles, associate professor of clinical psychiatry, and Ze Min Deng, an associate research scientist, found it anyway. She began collecting families that had the disorder and first localized the gene to chromosome 2. She then identified a gene, called BMPR2, in which patients had
mutations. Because not every affected individual has a mutation in the gene, she is now looking for other genes implicated in the disorder. She also is trying to develop a mouse model with the gene to see what happens in the lung.

A large family with many affected individuals helped in the identification of a gene for a rare form of familial epilepsy, one in which individuals experience auditory hallucinations or distortions of sounds with their seizures. Dr. Ruth Ottman, professor of epidemiology in the Mailman School of Public Health and deputy director for research at the Sergievsky Center, had been assessing 2,000 families with members who have epilepsy and came upon one with an unusual form of the disease that followed Mendelian inheritance. Her research team localized the gene to chromosome 10q24 and then worked with colleagues at the Columbia Genome Center, including Sergey Kalachikov, associate research scientist, and Dr. T. Conrad Gilliam, professor of genetics and development and director of the center, to identify it.

Identification of the gene, LGI1, or the leucine-rich glioma inactivated gene, was one of the largest successful positional cloning efforts in the world. It required the complete DNA sequencing of 4.2 million base pairs of DNA, identification of 28 full-length genes, and systematic re-sequencing of 21 genes to identify the disease alleles. Unlike other genes already found to cause familial epilepsy, this gene was not an ion channel. But it may play a role in how neurons migrate during development and create faulty wiring. Dr. Ottman hopes to understand how the gene works during neural development and what its relationship is to all forms of epilepsy.
The house call—long dismissed as old-fashioned and inefficient—is making a comeback.

“The house call is an old tradition, but in this day and age, it’s not always economically feasible or efficient because we need to see patients in 15-minute intervals,” says Delphine Taylor ’93, assistant clinical professor of medicine. “Technological advancements and the types of equipment we use can also make house calls impractical.”

But as the 11 individuals who selected primary care as part of their internal medicine residency discovered this year, house calls are no longer just a nostalgic chapter in the history of medicine; they are once again part of the training curriculum.

When she was a journalist, Dr. Taylor routinely gained access to people in their homes. She discovered that she learned as much, if not more, from her subjects by observing them in their home environments as she did from what they said. She found the same to be true during her primary care residency at Columbia-Presbyterian, when she made some informal home visits to her sickest patients.

Dr. Taylor recalls two particularly complicated cases, where hospitalized patients were unwilling to discuss their personal situations.

THE COLLEGE OF PHYSICIANS & SURGEONS OF COLUMBIA UNIVERSITY
SPRING 2002

Three residents participating in the primary care house calls program are shown in the Washington Heights neighborhood as they head to visit patients in their home environments. With them—in the red shirt—is Delphine Taylor, who created the home visit program as part of primary care training. The residents in the photos are Sue Cullinane, Joyce Jones (wearing glasses), and Jeff Farber.
“When I finally persuaded them to let me come see them at home, I was able to see for myself how impoverished these people were,” she says. “Some things were able to remain unsaid, but I could still see their troubles and, where I could, take action to help.”

In January 2001, Dr. Taylor became assistant director of the primary care track of the internal medicine residency program. Throughout the spring, she laid the groundwork for establishing a home visit requirement for primary care training. This included approaching the Arnold Gold Foundation, through which she was able to acquire funding for a home visit program, which began this academic year.

While studies have shown that home visits either by doctors or nurse practitioners may result in, among other things, a reduction in the need for long-term facility care, Dr. Taylor is more concerned with the impact these visits will have on how doctors treat their patients in a clinic or hospital and how effectively they communicate with them.

“The value of the home visit, especially during residency, is very important. Residents are the frontline people with the patients, the people the patients see first and most often,” Dr. Taylor says. “Strong relationships are developed, and I wanted to see how the home visits affected that dynamic.”

Says Ricardo Camacho, one resident who participated in the program: “I have found that the patients whose homes I have visited clearly have a closer bond towards me as their physician. They also seem to be more compliant with medical care, as if I had proven my interest in their well-being.”

Of course, it’s not possible to visit every sickly or disabled patient at home. But those the residents do see should be able to provide a framework that will allow the doctors to effectively assess others seen only in a hospital or clinic.

“Hopefully, these visits will teach the residents to ask questions they may not have thought to ask otherwise,” Dr. Taylor says. “How do you organize your medications? Can you get in and out of the bathtub by yourself? Who else lives with you? How did you get here today?”

Often the residents take the subway or walk to their home visits. This, Dr. Taylor says, exposes them to the community, which is an important factor to understanding a patient’s overall well-being.

“The residents are able to see many components of their patient’s environment, such as the street he lives on or the stores where he may do his shopping,” she says.

The home visits also provide residents with the opportunity to follow through on care begun in the clinic or hospital. They can make sure that medications are being taken, that home health care is satisfactory, and that the overall safety of the patient is ensured.

But Dr. Taylor admits that it can be quite difficult for a young doctor to see patients in sad situations. One very elderly patient had been admitted to the Allen Pavilion a number of times. While she was there, she tried to convince the staff that she could walk, but they wouldn’t let her try. During the home visit, she insisted that the doctors watch her walk. With the help of her dedicated home health care worker, she was able to successfully use a walker. It took her about 15 minutes to go five feet, but it was important to her to show that independence.

“She had eight children, and none of them were involved in her care at all. The walls of the apartment where she had lived for 40 years were completely bare,” Dr. Taylor says. “The only pictures, on a small table, were of the children of her home health care worker.

“We see tragedy and pain all the time, but there’s something about being in someone’s home that makes it really sink in,” she continues. “It makes you think about what else is going on in the patient’s life.”

Deepu Gowda, another participating resident, agrees that insights gained during the home visit can be dramatic.

“To listen to a patient speak about how arthritis is affecting her knees is one thing, but to watch her labor
for 20 minutes to climb two flights of stairs is an understanding altogether different,” he says. “That image sits indelibly in my mind, and I see it every time a patient returns to the clinic to tell me her pain is worse.”

Sad or difficult situations parallel encouraging ones. One resident was very concerned about a patient suffering from high blood pressure and diabetes. During the home visit, however, she behaved more like a hostess than a patient, and it was obvious that she took very good care of herself.

“Home visits can sometimes put the residents’ minds at ease, when they see that their patients are doing well,” Dr. Taylor says. “In these instances, these residents may even gain some insight into how to work with patients who are not as fortunate.”

For the residents to get as much out of the home visits as possible, Dr. Taylor asks them to “isolate” the events, to look at them as different experiences from being in clinic or interviewing a patient in the hospital. With her journalistic background, she concluded that the best way for residents to do this is to write descriptions of their experiences. She asked for help from Dr. Rita Charon, professor of clinical medicine and director of the narrative medicine program at P&S.

“Dr. Charon had been using the concept of a ‘parallel chart’ with her students,” Dr. Taylor says. “While the stu-
ents were on the wards, they would go about their normal routines of examining patients and recording the vital statistics, such as blood pressure and test results. But they would also keep this parallel chart, where they would record their feelings and experiences with their patients. In these charts, you would see things like ‘This patient is driving me crazy,’ or ‘He reminds me of my grandfather,’ or ‘Why can’t this person get the MRI he needs, but the patient with insurance can?’

“For the students to learn from the visits, they really need to reflect on them,” Dr. Charon says. “When they do, they become invested in the patient’s future, and the care becomes more powerful.”

The narrative process begins with a pre-visit assessment, which indicates the patient’s medical problems and the goals of the visit. For example: “An 82-year-old man with (in order of seriousness) terrible asthma, COPD, dementia, and arthritis. The goal is to check patient’s breathing. Social support also needs to be evaluated, as daughter is not always available.”

Following the home visit, the resident writes about the experience. According to Dr. Charon, he or she should start writing immediately after the experience—ideally, on the subway on the way home—about what they saw, what they observed about things like the state of the patient’s home or his demeanor.

In this case, the resident was surprised to find that his patient, whom he had been seeing frequently for years, was suffering from depression. This fact, previously hidden, came out while observing the patient interacting with his family in his home environment. Also, being comfortable in his own home, the patient felt more comfortable opening up about his mood problems.

Eye-opening experiences such as this one, where the resident discovered that what he thought were priority health issues in fact were not, are not uncommon on these visits.

“But these visits, you get the opportunity to step back and see patients in a whole new light,” Dr. Taylor says. “When this happens, assumptions we may have made about patients can be changed or completely erased. The residents are encouraged to question their assumptions during the entire process.”

Residents meet with Drs. Taylor and Charon every few weeks to share their experiences and what they have written. It allows the entire group to get a sense of the visit and offer advice.

“Through the home visits, I was able to get a bit of insight into my patient’s home life,” says program participant Joyce Jones. “I was able to process what I saw by writing the narrative and through discussion of my experience with my colleagues.”

“The writing is often very good,” Dr. Charon says. “It’s astonishing; the language the residents use is plain and grave, and elevated as well. It’s indicative of the situation they faced. The discussions during these sessions are revealing. The residents are forced to inspect their emotional attachment to their patients, and they are often surprised by how strong that attachment is.”

Judged a success by Drs. Taylor and Charon and the residents who participated this year, the program will continue next year with four more residents. As for the reflections penned by this year’s participants, Dr. Taylor has a number of ideas for their use.

“Of course, there are confidentiality issues, but we never use patients’ names,” she says. “Dr. Charon and I will likely develop an evaluation tool, to determine exactly how the residents benefited. I would also like to write about the exercise so that other training programs could learn from it.”
The motion picture “A Beautiful Mind” tells the life story of John Forbes Nash Jr., the brilliant mathematician whose long but ultimately successful battle with schizophrenia led him from the depths of insanity to Stockholm as 1994’s Nobel Prize winner for economics. “A Beautiful Mind” uses storytelling to paint an emotionally resonant, taboo-shattering portrait of what it’s like to live with and recover from a mental illness—taking the audience on a part-symbolic, part-real life journey that is often harrowing, often humorous, but always candid and compassionate.

Thanks to high-profile stories like the one told in “A Beautiful Mind,’ conventional wisdom about mental illness is beginning to change. P&S uses real-life stories to undermine the stigma of mental illness through a program between the Department of Psychiatry and Fountain House, a New York-based mental health social service organization that also engages in advocacy. The program uses ongoing, face-to-face interactions between medical students and individuals recovering from mental illness to foster understanding between future doctors and the kinds of patients they will be entrusted to serve.

Three years after its start, the Columbia-Fountain House mental illness education program is a vital and permanent part of the psychiatry curriculum. Every two weeks, a new group of first- and second-year medical students—all of whom are required to attend psychiatry rotations—hears firsthand the life stories of Fountain House members, told eloquently by the individuals themselves.

The P&S-Fountain House partnership, however, took time to evolve. Cross-purposes nearly killed the program before it ever got off the ground.

**LEARNING MENTAL ILLNESS FROM SOME WHO LIVE IT**

*By Leslie Boen*
“Most of the patients that students see come from the Columbia-Presbyterian and New York State Psychiatric Institute inpatient wards,” says Dr. Janis Cutler, associate clinical professor of psychiatry, co-director of medical student education in psychiatry, and co-founder of the program. “I was really making an effort to find another source for diagnostic interviews to give students access to patients in a different phase of illness.” But Fountain House staff had an entirely different set of expectations for the program and, after witnessing the first meeting between P&S students and Fountain House members, decided to reassess the value of the interaction.

“We noticed right away that students were focusing on the disease rather than the people behind the disease,” says Kenneth Dudek, executive director of Fountain House. “We felt strongly that the diagnostic interview format would not allow us to fulfill our core goals—to help future physicians move past stereotypes of the mentally ill and become more informed, compassionate practitioners. This can only be achieved if the students are allowed to relate to our members as human beings, engaging them in an open and honest dialogue about their lives, realities, hopes, and dreams.”

Even though the original intentions for the program were not realized at first, the Department of Psychiatry saw the value in working with Fountain House and collaborated with the staff at Fountain House to replace the diagnostic interview format with a mutually acceptable framework.

“I still thought it was really important to expose students to Fountain House members to give them the sense that patients with severe psychiatric problems can go back to work and have lives,” says Dr. Cutler. “It gives them hope that they can achieve good outcomes as doctors.”

Today, when Fountain House members come to campus, they come as educators rather than as patients. Gone are the days of clinical encounters, intake interviews, and diagnostic questionnaires. Over the course of a one-hour lecture, up to two members of Fountain House give brief presentations, recapping their life stories. Students use the remaining time to ask questions about any and all aspects of living with a mental illness, running the gamut from early symptoms to recovery and social stigma. Both students and Fountain House members appear to benefit from the experience.

“The members who have participated in the program agree that speaking to Columbia students has been an important part of their recovery and a welcome opportunity to give back,” says Mr. Dudek. “It enables them to inform future doctors about how they want to be treated, perhaps helping future patients get better treatment than they did.”

Juliette Lee, president of the P&S Class of 2003, found value in the program. “It was definitely an important part of the course to meet with Fountain House members. There is a definite limitation to how much you can learn about mental illness, in which so many of the manifestations are subtle behavioral nuances and social interactions, without talking to the patients. Plus, for many of us, this was the first chance we had to meet people with psychiatric disorders who overcame dire circumstances to become active and productive members of society, an optimistic counterpoint to the acute illnesses we had been seeing.”

“Patients with severe psychiatric problems can go back to work and have lives. It gives students hope that they can achieve good outcomes as doctors.”
In 1944, Franz Kallmann, working at the New York State Psychiatric Institute, described a syndrome that has since carried his name. Patients with this problem—about 1 in 10,000 males—are infertile. We have learned a lot about Kallmann’s syndrome in the past 58 years, including the nature of a defective gene and the embryological basis of the failure.

We know about the inability of the cells that are destined to secrete gonadotropin releasing hormone (GnRH) to migrate from the olfactory epithelium to the hypothalamus. Once in the brain, these cells regulate the pituitary-gonadal axis. This is a tough journey, crossing a part of the skull into the brain. The processes of olfactory neurons also must make this voyage to the olfactory bulb on the wine-dark sea of the extracellular matrix and their failure of transit results in the other aspect of the syndrome, a complete inability to smell.

Yet there are mysteries. About 18 percent of Kallmann’s patients carry a defect in an X-linked gene called Kal-1. We know what Kal-1 produces—a secreted protein that can induce neurite growth by binding to neurons. But what of the other 82 percent who inherit the syndrome? We do not know what genes are defective in these people nor are we sure that understanding the nature of such genes would offer a way to treat the problem. But the world gets nowhere without confidence and a scientist’s first conviction is that knowing more is better than knowing less.

Our second conviction, which is almost an article of faith, is that the mechanisms that neurons use to find their targets are conserved and should be the same in humans and in lower animals, where experimentation is easier. This may seem unlikely, but experience tells us that putting our money on evolutionary conservation is usually a good bet. Enter the nematode worm, C. elegans, which, during the past 35 years, has developed into a powerful experi-
Big things out of small things come. Particular neurons can be made to express green fluorescent protein. In this case, a fluorescent neuron in the brain overexpresses Kal-1 and has several extra neurites, which are marked with arrows. This happens in every worm, except those that carry suppressor mutations. Normal worms never make these false starts.

The neuronal circuitry of this nematode is understood and each of the 343 neurons can be seen. What Dr. Hobert, with graduate student Katie Berry and postdoctoral fellow Hannes Buelow, did was to overexpress the human gene Kal-1 in a particular neuron. Ms. Berry and Dr. Buelow could see that one of these neurons started to sprout small extensions called neurites, which were never present in normal worms. A worm with a defect is a tempting target for one of the favorite tools of geneticists: suppressor analysis. Imagine a series of events that must occur for a neuron to migrate or to extend an axon. We know only one of these events: tinkering with Kal-1 expression. But if we could create second mutations in particular genes so that the defect is circumvented, we would be able to define other genes that act in the sequence of events that gets a nerve to the right place. You can’t do this with every organism, only in those for which genetic techniques have been worked out, including C. elegans. The team designed what we call a suppressor screen, which is a long and sometimes tedious business (two people in front of the microscope for weeks), but in the end they found seven additional genes, each of which, when eliminated, corrects the defect caused by overexpressing Kal-1. The inappropriate neurite extensions shown in the figure disappear. The first of these mutations eliminates a proteoglycan-modifying enzyme that makes part of the matrix through which the neurons or their processes must migrate. Change the matrix and the aberrant outgrowth of sprouts disappears. Or perhaps it will turn out to be more complex. Six genes remain to characterize, but finding out what they are is just a matter of time, given the experimental resources provided by hundreds of laboratories that work on this worm.

But are our two articles of faith justified? Are the genes recovered from the worm defective in that 82 percent of Kallmann’s patients for whom the precise defect is not known? The idea has always been that once the genes are found in the worm, the Hobert lab would bootstrap its way to the human genes, which will look a lot like the worm genes. The question now is simple: Is the gene for the proteoglycan-modifying enzyme defective in any families with Kallmann’s disease?

Dr. Christine Petit, in Paris, has been following Kallmann’s families in France and has a large collection of DNA samples from these patients. Her group recovered the Kal-1 gene, upon which everything here is based. Dr. Hobert and Dr. Petit are collaborating. By sequencing patient samples, we should soon know whether the first gene identified in the suppressor screen, the one that codes for the proteoglycan-modifying enzyme, has a defective counterpart in Kallmann’s patients. That may not permit a cure, but it will lead to a genetic test.

Kallmann’s syndrome, defined at Columbia 58 years ago, is under intense scrutiny in the Department of Biochemistry. Let’s hope that our faith in knowing more and in evolutionary conservation is again justified.
Third Audubon Building Tops Out

The Irving Cancer Research Center, the third building in Audubon Science and Technology Park, was officially “topped out” Feb. 22. The building is named for New York City philanthropist and food distribution executive Herbert Irving. Shown here after raising the flag on the rooftop of the building, located on St. Nicholas Avenue between 166th and 167th streets, are, from left, Dr. I. Bernard Weinstein, director emeritus of the Herbert Irving Comprehensive Cancer Center; Dr. Karen Antman, current director of the Herbert Irving Comprehensive Cancer Center and Wu Professor of Medicine; Dr. Herbert Pardes, president and CEO of New York-Presbyterian Hospital; Mr. Irving; Dr. Gerald Fischbach, executive vice president and dean; Florence Irving; and Dr. Ruth Fischbach. Occupancy in the building’s nine floors of research space, underground parking, and clinical facilities, including a comprehensive breast cancer screening facility, is expected a year from now.
Reach Out and Read: How New Students Reached Out to Read (and Learn)

By Aileen Moroney

Reach Out and Read, a national program that urges pediatricians to encourage literacy in their patients, also served as a way to orient incoming P&S students to their new neighborhood at the August 2001 orientation.

Older P&S students identified children from the Washington Heights community and incoming students read aloud to them and engaged them in activities related to the stories.

When Jeremy Keenan, a third-year M.D./M.P.H. candidate, approached local day-care centers, he found enthusiastic response. “There wasn’t one center that didn’t want to participate,” says Mr. Keenan. “The ones that declined only did so because they were closed for vacation. In fact, the ones that weren’t able to take part this time asked us to contact them for future events.”

The orientation event, funded through a grant from Alpha Omega Alpha, the medical school honor society, began with a Dominican-style lunch catered by a local restaurant. New students received brief training on how to read to children—how to hold the books and read with enthusiasm. They also received ideas for age-appropriate activities that could accompany the readings.

After lunch, members of the Class of 2005 ventured to either Highbridge Park or J. Hood Wright Park, where about 125 children from local day-care centers were waiting with their teachers.

“The park provided such a relaxed setting, and the kids seemed to warm up to us quickly,” says Katy Nellans’05. “They were very receptive and eager to read many different types of books. I loved having them tell me the story just using the pictures.”

The session at each park lasted about 90 minutes. Students gave each child two books to take home and a special bookmark that listed the addresses and phone numbers of local area libraries on one side and reading recommendations for various age groups on the other.

Overall, the response to the event—from children, teachers, and P&S students alike—was very positive, and another Reach Out and Read program is planned for orientation this year. The event will again be coordinated by Cultura, a student-run organization within the P&S Club that was founded to give students the opportunity to become more aware of differences among various cultures and eventually appreciate how these differences will affect the care they provide as doctors.

“The children had a wonderful time,” Mr. Keenan says, “and we received great feedback from the day-care teachers.”

The turnout from the new P&S students also was impressive. Although the program was voluntary, some 130 out of the 150 incoming students chose to participate.

“Reach Out and Read was a great way to introduce our class to the Washington Heights community,” says Adam Reese’05 from northern Virginia. “Actually getting to know the children from the community allowed me to learn a great deal about the neighborhood and the people who live here.”

Katy Nellans, who is originally from the Chicago area, concurs. “I had no idea what Washington Heights was like, and meeting these preschoolers really made me more aware of the diversity and culture of the area. Overall, it was a wonderful way to spend an afternoon.”
M. Renate Dische, Ph.D., M.D.

Dr. M. Renate Dische, professor of clinical pathology and clinical pediatrics, died Dec. 29, 2001. A specialist in pediatric pathology and congenital heart diseases, she continued to come into work until just the last few weeks of a prolonged struggle with ovarian cancer. Dr. Dische was born in Breslau, Germany, and immigrated to the United States in 1939, where she obtained a Ph.D. degree in biochemistry (1953) and an M.D. degree (1957), both from Columbia.

She completed a residency in pathology at Bellevue Hospital and later did a fellowship in pediatric pathology at Columbia. She wrote more than 60 papers on pediatric pathology and trained hundreds of pediatric pathologists.

George Humphreys II, M.D.

Dr. George H. Humphreys II, the Valentine Mott Professor Emeritus of Surgery, died Dec. 18, 2001, at age 98. His association with Columbia-Presbyterian began in 1930, when he became a hospital intern. As chairman of surgery at P&S from 1946 to 1969, he led the department through a period of growth and achievement and was among the first to perform several procedures in pediatric and thoracic surgery.

A native of New York City, he received his M.D. degree from Harvard in 1929. He earned a doctor of medical science degree from Columbia in 1935. He retired in 1969.

OTHER FACULTY

Dr. Kathryn Cozine, retired associate clinical professor of anesthesiology, died Dec. 21, 2001.

Dr. Margarita Silva-Hutner, special lecturer in dermatology, died Feb. 6, 2002.
ALUMNI

CLASS OF 1934
Bernard Roswit died March 1, 2001. A retired radiation oncologist, Dr. Roswit was professor emeritus of radiation therapy at Mount Sinai’s medical school and a former director of radiotherapy at the Bronx VA Hospital. A respected specialist in the field, he was also a consultant to Memorial Sloan-Kettering Cancer Center, Bronx-Lebanon Medical Center, Catholic Medical Center in Queens, Montefiore Medical Center, and the American Cancer Society. He served as a major in the U.S. Army Medical Corps during World War II. Having treated more than 15,000 cancer patients and trained more than 300 residents in radiation oncology over the course of his career, Dr. Roswit received a commendation from the chief medical director of the VA in 1960. The author of 75 scientific papers and seven book chapters in his field, he was founder and longtime director of radiobiology and radioisotope labs at the VA Hospital in the Bronx, where he worked in association with Nobel laureate Dr. Rosalyn S. Yalow. He is survived by his wife, Marcia, a daughter, and a son.

CLASS OF 1938
Walter R. Bonime, a clinical professor of psychiatry at New York Medical College, who continued practicing psychiatry and training analysts until age 92, died Oct. 24, 2001, after a fall. Among his many publications are two books, “The Clinical Use of Dreams” (1962) and “Collaborative Psychoanalysis: Anxiety, Depression, Dreams and Personality Change,” a textbook published in 1989. He served in the U.S. Public Health Service. His honors included the Silverberg Award of the American Academy of Psychoanalysis. Survivors include a son, a daughter, a stepson, a stepdaughter, nine grandchildren, and four great-grandchildren.

CLASS OF 1939
William G. Cahan, thoracic surgeon and former professor of surgery at Cornell, who campaigned tirelessly against the hazards of smoking, died Oct. 7, 2001, at age 87 at Memorial Sloan-Kettering Cancer Center, the institution with which he had been affiliated for more than five decades. Having joined the surgical staff there in 1949, he was appointed senior attending surgeon in 1990. As chairman of People for a Smoke-Free Indoors, Dr. Cahan successfully lobbied the New York City Council to restrict smoking in restaurants and public buildings. He recounted his life and career in a memoir, “No Stranger to Tears: A Surgeon’s Story,” published in 1992. His patients included high-profile personalities from the world of theater, fashion, journalism, and diplomacy. His encomia included the 1982 Distinguished Service Award of the American Cancer Society and the 1990 Life and Breath Award of the New York Lung Association. He served in the U.S. Air Force during World War II. He is survived by his third wife, Grace Mirabella, two sons from a previous marriage, and seven grandchildren.

CLASS OF 1941
Word has been received of the death of retired internist William J.H. Fischer in 1997. Dr. Fischer served as a captain in the U.S. Army during World War II. A former director of medical education at Rhode Island Hospital in Providence, he joined the board of governors of the Charlotte Hospital in Torrington, Conn., following his retirement from active medical practice. Survivors include his second wife, Claudia, two daughters, and a son. • Ralph M. Greenlee, a retired surgeon, died Oct. 21, 2001, at age 86. Dr. Greenlee, who practiced surgery for more than four decades, was a former chief of surgery at Lawrence Hospital in Bronxville, N.Y., and a founder of the Block Island Medical Center. He is survived by his wife, Dorothy, two daughters, a son, and six grandchildren.
Class of 1943M

Peter Knowlton, a retired general and child psychiatrist, died Dec. 5, 2001. Dr. Knowlton was a former senior attending at Bryn Mawr Hospital in Bryn Mawr, Pa. He is survived by two daughters, three sons, and a grandson.

Class of 1943D

Henry W. Dodge Jr., a retired neurosurgeon, died Sept. 9, 2001. Dr. Dodge earned a master of science degree from the University of Minnesota Graduate School of Medicine. Past president and research director of the Neurosciences Institute and Foundation at the University of Southern California, he also taught anatomy there. During World War II he served as a special consultant to the Surgeon General of the U.S. Navy. He headed the U.S. Army team that surveyed the casualties of the A bomb explosions in Hiroshima and Nagasaki. Survivors include his wife, Hoda, four children from a previous marriage, and three grandchildren.

Retired otolaryngologist Francis C. Edmonds died July 22, 2001. Dr. Edmonds had been affiliated with the Manhattan Eye, Ear & Throat Hospital. He is survived by his wife, Grace, two daughters, and two sons.

Class of 1944

William E. Askue died Oct. 15, 2001, at age 82. Dr. Askue served with the U.S. Army Medical Corps during World War II. A former clinical professor of pediatrics at Albany Medical College, he was a founder of the Poison Control Center at Kingston Hospital. Dr. Askue is survived by his wife, Elizabeth, three daughters, a son, and eight grandchildren.

Class of 1951

Belated word has been received of the Oct. 31, 1999, death of Nicholas W. Van Leeuwen. A retired radiologist from Plattsburgh, N.Y., Dr. Van Leeuwen had been director of the radiologic technologists school at CVPH Medical Center in Plattsburgh and a consultant in radiology to the Air Force base hospital there. After World War II, he served as chief of radiology at the U.S. Army Hospital in Nuremberg, Germany. He is survived by his wife, Nancy, two daughters, two sons, and three grandchildren.

Class of 1952

George W. Allen died Sept. 27, 2001, from metastatic colon cancer. An associate professor and former acting chairman of otoaryngology at Northwestern University, Dr. Allen served as a former president of the Chicago Laryngological and Otological Society. In 1988 he received the Commissioner’s Special Citation of the Food and Drug Administration. His father, the late Henry Dawson Allen ’18, was for a long time the oldest living P&S graduate. His uncle, Theophilus Powell Allen, graduated from P&S in 1922. George Allen is survived by his wife, Janice, and a son.

Class of 1954

Following a valiant 14-month struggle with a glioblastoma, Frederick A. Klipstein, an expert in tropical diseases, died Aug. 15, 2001. Emeritus professor of medicine, microbiology, and immunology at the University of Rochester, Dr. Klipstein had devoted a great deal of research to tropical sprue, a malabsorption syndrome prevalent in the tropics. In this endeavor he spent several years at the University of Puerto Rico and Albert Schweitzer Hospital in Haiti. His other research interests included the bacteria E. coli, for which he conducted one of the first clinical trials of a synthetic vaccine, and Campylobacter jejuni. He previously served on the faculty at P&S. Following his retirement, Dr. Klipstein volunteered his services as a physician at the University of Rochester’s AIDS clinic and served on the boards of directors of AIDS Rochester and the Humane Society of Monroe County. He is survived by his wife, Rose-Marie, and three sons.

Class of 1956

Pathologist Hans Baruch died Nov. 21, 2001. Dr. Baruch served in the U.S. Army from 1958 to 1960. A member of the pathology faculty at Mount Sinai, he also was affiliated with City Hospital of Elmhurst in Queens. He is survived by a son and a sister.

Class of 1957

Earl I. Hammer died Nov. 24, 2001, of complications of multiple sclerosis. A nephrologist on the medicine faculty at Harvard and a research
associate in chemistry at MIT, Dr. Hammer served as a lieutenant commander with the U.S. Naval Reserve from 1967 to 1969. There are no known survivors.

**Class of 1959**
The distinguished pediatric cardiologist, **Mary Jane Jesse**, a former president of the American Heart Association, died Nov. 7, 2001. Her multi-faceted pre-medical career included stints as violist for the Louisville Philharmonic Orchestra (which she subsequently managed), reporter for the Louisville Courier-Journal, aircraft draftsman for Curtis-Wright Corporation, radio broadcaster and publicity writer for NBC, and copywriter for the advertising giant Young and Rubicam. But medicine was lurking in the wings and a brief experience volunteering as a Red Cross nurse’s aide at Memorial Sloan-Kettering Cancer Center clinched it. Bucking all odds, she pursued the required pre-medical courses at Fordham University and Marymount College, applied to and entered P&S in 1956, and graduated at age 41. A self-styled “impossible optimist,” she found medical school “like opening a splendid present every day.” Board certified in both cardiology and pediatrics, she directed the pediatric medical intensive care unit at CPMC. Her career subsequently took her to the faculty of the University of Miami, where she helped found the division of pediatric cardiology, and to the directorship of the heart and vascular disease division at the NIH, the first woman to hold that position. She later returned to Miami as professor of pediatrics. Among her many research interests, Dr. Jesse studied the predisposition of children to develop hypertension later in life. “Our hypothesis,” she said, “has been that risk factors for coronary heart disease and atherosclerosis have to be present for a long time before their effects are shown.” In 1978, she served as a member of the U.S. delegation to Italy for the development and approval of a scientific agreement on research in atherosclerosis. At 67, an age when others contemplate retirement, Dr. Jesse accepted the position of associate senior vice president and associate provost for health affairs and professor of pediatrics at the University of Cincinnati, simultaneously taking the reins as president-elect, then president, of the American Heart Association. On a 1994 alumni reunion questionnaire, the indefatigable Dr. Jesse wrote, tongue in cheek, “Had my fifth retirement party in January. People are beginning to think my retirement plans are a scam in order to get a party!” A loyal alumna, she left a generous provision for P&S in her will. Her survivors include six nieces and nephews.

**Class of 1975**
**James W. Ford** died of cancer Nov. 27, 2001. An ophthalmologist in private practice, Dr. Ford extended his caring to the political plane in Memphis, Tenn., as city councilman and chairman of the Shelby County Commission’s subcommittee on health and hospitals. In that capacity, he worked hard to improve the quality of health-care delivery. He also labored on a spiritual plane as an ordained minister and pastor of the Fellowship Church of God in Christ. As physician and pastor, he served as a staff physician to the Memphis Health Center, caring for some of the nation’s most medically underserved. He continued to see patients even after his health confined him to a wheelchair. He is survived by a son.
The standard red, pocket-sized "Medical Management of Chemical Casualties Handbook," issued by the U.S. Army Medical Research Institute of Chemical Defense (USAMRICD), begins, "Chemical warfare is not a popular topic, and most military health care providers do not willingly become familiar with it." One notable exception is Col. Jonathan Newmark’78, chief of operations of Chemical Casualty Care at the research institute located at Aberdeen Proving Ground, Md., and clinical associate professor of neurology at the Uniformed Services University of the Health Sciences in Bethesda.

Col. Newmark wears multiple hats. He is an expert and educator in the medical response to nerve agent attack; a consultant and adviser to defense and investigatory organizations, both domestic and foreign; and coordinator of research in neuroprotection and medical response to chemical attack.

Since transferring to Aberdeen in 1997 from a posting as staff neurologist at the Madigan Army Medical Center in Tacoma, Wash., he has functioned, for the most part, behind the scenes, in the relative obscurity of the military medical research and training community. Until Sept. 11.

Battle Lines Shift to Include the Homefront

Not many civilians, let alone health professionals, ever pondered the possibility of chemical or biological attack at home. Then came the unsettling news that Mohamed Atta, alleged ringleader of the terrorist attack on the World Trade Center, shopped for crop dusters ordinarily used for aerial spraying of insecticides (the manufacture and dissemination of which dovetails that of chemical

Jonathan Newmark’78
munitions). Next came reports of mysterious anthrax outbreaks in Florida, New York, New Jersey, and Washington, D.C. Gas masks and the antibiotic ciprofloxacin entered popular parlance and the public has been scrambling for accurate information ever since.

Needless to say, Col. Newmark's calendar filled up pretty fast. He and his team at USAMRICD have been on regular call to the FBI, the White House, and other government entities on questions of domestic preparedness. Nerve agents are now on the agenda at American Association of Neurology national meetings and other educational forums.

"You civilians have just woken up to a risk and reality that we in the military live with daily," the colonel observed in the course of an interview at his base of operations at Aberdeen Proving Ground, on a peninsula jutting out into the Chesapeake Bay. It was here that the U.S. Army established and built up its offensive chemical weapons program immediately before America's entry into World War I. Until its dismantling, in fulfillment of the terms of the armament ban signed by President Carter, this had been the largest chemical weapons manufacturing facility in the world. While stockpiles of old chemical munitions await safe destruction, the installation has since changed its mission to treaty verification, surveillance, and defensive research.

A Haven of Toxic Tranquility

The impressions of a first-time visitor to Aberdeen Proving Ground are disconcerting. The architecture is military modern, straight out of some 60s sci-fi movie. Vintage Cold War era warning signs would ordinarily seem arcane, were it not for the heightened national state of alert since Sept. 11. But just beyond the cement blocks of the security clearance checkpoint, where one might expect a giant mutant alien to appear, a buck peeks out from behind a tree and shakes its antlers at a troop of soldiers jogging along in full gear. Overhead, meanwhile, a bald eagle circles low, competing for airspace with an Army chopper.

“One of the pleasant peculiarities of this place,” Col. Newmark points out, “is that restricted access and the absence of predators have made it a prime wildlife habitat. We have 100 nesting bald eagle pairs, the largest number in the Northeast corridor.”

Wildlife notwithstanding, the barbed wire surrounding certain restricted facilities dispels any illusions of bucolic tranquility. Though manned by a relatively small contingent of research personnel, USAMRICD, one of several operations on base, is America's lead training facility and lab for countermeasures against chemical warfare agents.

A Medical Military Man For All Seasons

“Welcome to our country. We have ways to make you enjoy your stay with us!” Col. Newmark captures the mood in a mock-Transylvanian accent. There is nothing Dracula-like about him. His warm smile clashes with the severity of a military crewcut and his ebullient personality and boundless energy seem caged in khaki fatigues. Among his unusual mix of qualities and talents, Col. Newmark, a clinical neurologist by training, is also an accomplished musician, conductor, and composer, a master oarsman (1987 Kentucky state single sculling champion), and the genial talk show host and co-star of three satellite CME programs on medical response to chemical warfare and terrorism. Responding to a question about his preferred title—Dr., Colonel, or Maestro—he grins, “Right!” in a nod to all three.

From Clinical Neurologist to Colonel

As Col. Newmark remarked in a prescient talk titled “Chemical Warfare Agents: A Primer” at a military medical conference, “The Operational Impact of Psychological Casualties from Weapons of Mass
Destruction,” in July 2000, “Terrorism follows its own
dynamic.” While the stakes may have changed for
civilians since Sept. 11, militarily speaking, it’s still
the same old game.

Clicking around on his computer, he found and
displayed for a visitor’s benefit “The Sarin Fight
Song” of the Japanese religious cult Aum Shinrikyo,
the folks responsible for the 1994 release of the
nerve agent sarin in Matsumoto that killed seven and
the 1995 release on the Tokyo subway that killed 12,
sickened thousands, and panicked a nation:

In the peaceful night of Matsumoto City
People can be killed, even with our own hands.
The place is full of dead bodies all over.
There! Inhale sarin, sarin.
Prepare sarin! Prepare sarin!
Immediately poisonous gas weapons
will fill the place
Spray! Spray! Sarin the brave, sarin.

“Probably sounds better in the original Japanese,”
he concedes. A walking encyclopedia on the history
of chemical warfare, Col. Newmark’s particular area
of expertise is nerve agents, the deadly class of
chemical weapons first developed (though never
used) by the Germans during World War II and first
employed on the battlefield by Iraq against Iran in
the late 1980s, costing thousands of lives. “One thing
I like about the military,” he stresses, “is that you
don’t deal with the way things ought to be but the
way things really are. And things aren’t always nice.”

His own journey from white coat to khaki is a tale
with multiple side trips. Though a grandfather was
drafted and completed his term of duty in the czar’s
army before emigrating from Russia to Morristown,
N.J., his parents had decidedly pacifist leanings that
hardly predisposed him to military aspirations. “Is
this reaction formation or what?” he recalls asking a
psychologist friend after joining the U.S. Army Med-
cal Corps Reserve in 1989. “I always wanted to be a
soldier,” he shrugs.

His active duty began in 1993 as staff neurologist,
chief of quality assurance, chief of the neurology clin-
ic, and chief of readiness for neurology services at
Madigan Army Medical Center in Tacoma, Wash. It
was at Madigan that he first experienced “the joys of
military medical practice at a state-of-the-art facility
with great patients, excellent residents, and a faculty
appointment to boot at the University of Washing-
ton.” An enthusiastic advocate of military medicine,
Col. Newmark sees the system as “a bomb shelter
against some of the detrimental changes going on in
American medicine.” As a clinician, he found it “pro-
foundly liberating” to be able to “just do what I think
the patient needs,” with no bureaucrats second-
guessing his medical decisions because “no money
changes hands.”

A first deployment as solo task force physician
with Operation Fuertes Caminos, a humanitarian
mission to Belize, whetted his appetite for military
life. His parents were less than pleased when a sec-
ond planned deployment would have taken him to
the combat zone of Somalia, had President Clinton
not called home the troops in time. He finally did deploy in 1996 to Saudi Arabia, in the immediate wake of the terrorist attack on a military housing complex at the Khobar Towers. Deputy surgeon with TF 2-1 Air Defense Artillery and Army Forces Central Command in Riyadh, he was the ranking officer of his unit. "So by dumb luck, I became a mass casualty planner." Tending to the medical needs of his detachment, he also participated in grand rounds at King Saud College of Medicine—"the first Jewish grand rounds speaker they've had for a while," he chuckles.

"The Brain Has More Interesting Things to Say Than Lub-dub"

Clinical neurologist to the core, he was inspired to study and treat the ailments of the brain by such mentors as Dr. Linda Lewis at P&S. "You couldn't ask for a better clinical role model than Dr. Lewis. She just had that presence and authority that patients respect. And at the same time, she was very thorough and very caring." Another P&S mentor, Dr. William G. Johnson, a Parkinson's researcher now at the University of Medicine and Dentistry of New Jersey-Robert Wood Johnson School of Medicine, once remarked, "Neurologists get to talk to the brain and it says much more interesting things than lub-dub, lub-dub."

After interning at Roosevelt Hospital, Dr. Newmark pursued postgraduate training at the State University of New York Downstate Medical Center in Brooklyn, then accepted a research fellowship in the development and metabolic neurology branch of the National Institute of Neurological Disorders and Stroke at the NIH. Additional training took him to Boston City Hospital, New England Deaconess, and Massachusetts General Hospital, where he completed a coveted fellowship in neuro-oncology and occupational neurology. In 1985, he joined the neurology faculty at the University of Louisville's medical school in Kentucky.

"Tell Us About Nerve Agents!"

A pivotal moment in his career path came in 1991, in the course of a fellowship in neuromuscular disease at the University of Pennsylvania. He had already joined the U.S. Army Reserve. One day, on the eve of Operation Desert Storm, a departmental meeting was called to discuss the hospital's responsibility to treat any war casualties evacuated to Philadelphia. The department chairman turned to Dr. Newmark and said: "You're in the Army. Tell us about nerve agents."

That discussion motivated him to sign up for the course in medical management of chemical and biological casualties at USAMRICD, the same course he has now taught to more than 7,000 military and civilian health-care professionals, including students from 20 nations. That's not counting the global audiences of the interactive satellite CME programs in medical response to chemical warfare and terrorism. He helped write and design the programs.

Col. Newmark and his team also regularly take their expertise on the road, teaching the multiple
dimensions of medical response to chemical attack at home and abroad. He has traveled to and taught in more than 14 countries, including a training mission to coach NATO troops in Kosovo. Two of his students later showed up in the pages of Vanity Fair magazine as members of the rescue team at the World Trade Center in New York. "We're the only people in the country doing the medical training in this field," he says. As a member of the faculty of the Uniformed Services University of the Health Sciences in Bethesda, he also supervises residents in neurology.

While training is his top priority, Col. Newmark's mission as chief of operations includes significant consulting. His short tactical deployments have included, among other missions, service on the Army Chem/Bio Rapid Response Team assigned to the pastoral visit of Pope John Paul II to St. Louis in 1999, the Department of State Foreign Emergency Support Team assigned to security measures in Europe at the millennium, and the FBI Domestic Emergency Support Team sent to Salt Lake City in 2001 to engage in a dress rehearsal of security measures for the 2002 Winter Olympics.

In his capacity as research coordinator at USAMRICD, he built upon the work of Col. Edward Vedder, the head of the Army Biomedical Research Laboratory, who in the 1920s did landmark clinical descriptions of survivors of chemical attack. Col. Newmark's research protocols (all on animal models) include a behavioral study of the effects of nerve agent and a study of the primary mechanisms of neuroprotection, which may be similar in both stroke patients and in survivors of nerve agent attack. He also sponsors a study of huperzine A, a Chinese dietary supplement, as a treatment for nerve agent poisoning.

One of his primary assets, as a clinician with contacts in the civilian medical community, is to "connect the lab a bit better than it had been to the clinic." The historic link between military and civilian medicine has in the past reaped some rich rewards. For instance, the authors of the classic "Pharmacological Basis of Therapeutics" studied nitrogen mustard as a vesicating agent. While it did not prove effective as a chemical weapon on the battlefield, they stumbled on the first chemotherapeutic agent in the war on cancer.

And though he insists he was not recruited as a scientist, "but rather to spread the gospel about nerve agents to soldiers around the world," science—some with extramilitary implications—is indeed being done under his watch. Nerve agents work on the cholinergic system. "Well, it turns out, in Alzheimer's disease, there is a deficiency of the neurotransmitter acetylcholine. So the Alzheimer's drugs are of interest to us."

**Music Man**

While he tackled the study of medicine straight out of college, and took to soldiering in mid-life, music was there almost from the start. A violist and pianist, he lacks a music degree but has studied intermittently at various institutions, including the Juilliard School. For the past 21 years, he has been a regular participant at a chamber music conference and composers forum at Bennington College in Vermont. During his term of duty in Washington state, Col. Newmark played with the Tacoma Symphony Orchestra, the only active-duty Army officer in the country to serve in a professional symphony orchestra. Guest soloist over the years at various other venues, he also has tried his hand with the baton after studying conducting as a youth at a national music camp in Interlochen, Mich., and later at the University of Louisville. His recent gigs have included a stint as guest conductor with the Independence Sinfonia at Pennsylvania State University's Abington campus.

He launched into original musical composition in the early 90s and in 2000 entered a newly minted composition for string trio that won the Southeastern Composers Symposium competition, sponsored by Old Dominion University in Norfolk, Va. A member of the Baltimore Composers Forum, he is particularly proud of "Chaconne and Fugue for Horn and Piano," composed in memory of John C. Wood Jr.'76, a friend from P&S.

The Army has been accommodating Dr. Newmark's musical talent. He was asked to perform for the Army Surgeon General and has been guest soloist with the 389th Army Band at Aberdeen (where he's an honorary member). In addition, an Army woodwind quintet was put at his disposal.

Judging by the success of his ongoing balancing act of military chemical defense, medicine, and music, clearly the chemistry is right. "Wow, what a deal," says Dr. Newmark. "The Army gives me top residents, they give me great patients, and now they're giving me this government-issue woodwind quintet. What's wrong with this picture?"

Col. Newmark recalls once asking a friend, Dr. Jim Nuzzo, then a resident in the Boston/Harvard/Longwood program, how long he planned to stick with neurology. "Until it stops making me giggle," his friend replied. Paraphrasing the response, Col. Newmark says, "As long as the Army keeps making me giggle and treating me well, I plan to stick around."
PROFILES IN GIVING

CLARK TRUST BENEFITS P&S AND FAMILY

By Peter Wortsman

It’s a win-win situation, anyway you look at it,” retired surgeon Charles E. Clark ’43M observes, looking back on the decision he and his late wife, classmate and fellow surgeon, Margaret A. Clark ’43M, made some years ago to establish a charitable remainder trust at P&S. Under the agreement, annuity payments go out quarterly to a daughter with lifelong disabilities and the balance goes to establish a scholarship in their name at P&S.

“We were able to satisfy a charitable impulse to an institution that meant the world to us,” he says, “while ensuring the future livelihood of our daughter.”

A proud member of what television anchorman and author Tom Brokaw calls “the greatest generation,” Dr. Clark came of age at the outbreak of World War II. His class at P&S was one of two that went through a special accelerated program to turn out desperately needed physicians for the war effort. He served as a captain in the U.S. Army Medical Corps, first during the war as medical officer on a hospital train between Paris and the French port of Le Havre and immediately after as the commanding officer of a hospital for German prisoners of war in Nancy.

His wartime experience reinforced his determination to become a surgeon, like his older brother and fellow P&S alumnus, the late Ralph Clark ’27. As he puts it, “I loved the idea of being able to reach in and do something immediately to better the health of my patients.” Pursuing a surgical residency at St. Luke’s Hospital in New York after the war, he went on to enjoy “40 glorious years” of practice in Bergen County, N.J., where he still makes his home. “I was the old-fashioned general surgeon, the likes of which they don’t make any more,” he reflects. He served on staff and as a former director of surgery at Valley Hospital in Ridgewood, N.J., and as director of surgery at Pascack Valley Hospital in Westwood.

His late wife joined him in practice. They turned an old barn behind the family house into an office. And though he might, by inclination, have gone on practicing forever, a heart attack persuaded him to retire at age 74—“actually 74 3/4,” he specifies. “I was enjoying it right until the day I quit.”

Medicine runs in the family. A son, Dr. Charles E. Clark Jr., is a family practitioner in Vermont. “The two of you were obviously so happy with what you were doing, that sold me,” he once told his mother. A second daughter, pediatrician Mary Clark Romney ’76, followed her parents to P&S, where she met and married radiologist Benjamin M. Romney ’72.

A happy retiree, Dr. Clark devotes his free time to vegetable gardening, skiing, and water skiing, though “slalom is definitely out.” He is remarried, and while his second wife, Marilyn, a retired educator, does not have a medical background, she is equally committed to the cause of medical education.

“I feel personally very much indebted to P&S,” Dr. Clark says. “There are a lot of things in life I wouldn’t have had without this medical school, all the satisfactions of four decades of surgical practice. And I’d like to see others get that chance. It’s nice,” he adds, “to be a link in the chain of a great tradition.”

Charles E. Clark
THE COLLEGE OF PHYSICIANS & SURGEONS OF COLUMBIA UNIVERSITY
SPRING 2002

ALUMNI COUNCIL

The Nov. 14, 2001, council dinner was held at the Faculty House on Columbia’s Morningside campus. Guest speaker Jack Gorman’77, the Lieber Professor of Psychiatry at P&S, spoke on a topic on everyone’s mind: “American Stress, Anxiety, and Panic During the War on Terrorism.” In a talk that bridged the science and sociology of stress, Dr. Gorman discussed the body’s neural pathways involved in heightened levels of anxiety in the wake of shock and the media’s role in relentlessly enhancing and reinforcing that shock reaction. The primary culprit, he said, is fear, the key to many psychiatric disorders. He described the rat model to illustrate the neural pathway of shock, resulting in increased heart and respiratory rate, increased corticoid production by the adrenals, and hypoanalgesia or numbness. His reasoned presentation brought relief to an audience, most from the New York metropolitan area, still suffering from the psychological effects of Sept. 11.

MINORITY STUDENTS AND ALUMNI DINNER

Dr. Gerald E. Thomson, associate dean and the Samuel Lambert and Robert Sonneborn Professor of Medicine, set the stage Nov. 7, 2001, for the minority students and alumni dinner at Bard Hall by saluting Dr. Margaret Haynes, a distinguished guest and old friend of P&S. Former director of the Office of Minority Affairs at P&S, Dr. Haynes is now associate dean and director of the Office of Minority and Multicultural Affairs at NYU’s medical school. Dr. Thomson asked Lester W. Blair’74, chairman of the Alumni Committee on Minority Affairs, to introduce the guest speaker, Samuel Daniel’78, president and CEO of North General Hospital in New York.

“Never in my wildest dreams did I believe that I would be invited here to speak to you, but I am proud to be here,” said Dr. Daniel. His inspirational remarks mingled autobiography, economics, medicine, sound management principles, wisdom, and the heart and soul of service. “I am here, an immigrant, speaking to this body in an institution that’s as American as you can ever get,” he said. “I believe that this institution does give you the knowledge, skills, and background you need to succeed in American medicine.” Crediting BALSO, the Black and Latin Students Organization, as a home base and refuge that helped him make it, despite serious illness in his second year, Dr. Daniel went on to describe the cause to which he has committed that knowledge and those skills.

Founded in 1991, under New York Gov. Mario Cuomo as a “distressed hospital,” North General Hospital is a 200-bed acute care hospital at 121st Street and Madison Avenue in Harlem. The hospital has blossomed, in Dr. Daniel’s words, into “a beacon of light, giving health care to the community.”

Also assistant clinical professor of medicine at P&S, Dr. Daniel forsook a thriving medical practice on Central Park South to face the formidable challenges of North General Hospital. Initially joining the staff in 1992 as chief of gastroenterology, he rapidly rose to chief of medicine in 1996, medical director in 1998, and president and CEO in 2001.

In the current economic crunch, he readily admits, “I’ve been given a formidable task to turn a hospital around.” Eighty percent of the hospital’s admitted patients (many of whom are uninsured) walk into the ER. Lacking an endowment and, therefore, largely dependent on public funding, North General serves a medically underserved community with one of the highest cancer mortality rates in the city. “My goal,” he concluded, “is quite simply to take a vital Harlem institution and make it thrive.”

ALUMNI ASSOCIATION ACTIVITIES

Guest speaker Jack Gorman’77 and Alumni Association president Martha G. Welch’71

Alumni Association president Martha G. Welch’71 and guest speaker Samuel J. Daniel’78
CLASS NEWS
By Marianne Wolff'52

1947
Edgar W Branyon retired after practicing radiology for 40 years. In 1994 he was awarded the title of fellow emeritus by the American College of Radiology.

1949
The George Washington University Department of Psychiatry was the setting for the eighth annual Seymour Perlin Lecture; the subject was suicide and the lecturer U.S. Surgeon General David Satcher.

1951
Lila A. Wallis was honored at a reception in Cleveland hosted by the American Women’s Medical Association and Cleveland Clinic Foundation for her work as founder of the Advanced Curriculum on Women’s Health. Lila is a former president of AMWA; she is clinical professor of medicine at Weill Medical College at Cornell, where she is director of Update Your Medicine programs. She is a master of the American College of Physicians and laureate of the New York state branch of the American College of Physicians.

1952
In January 2002, Victor D. Herbert was presented the Mount Sinai Alumni Special Recognition Award. Victor is professor of medicine and chief of the Mount Sinai Hematology and Nutrition Laboratories and the Mount Sinai Nutrition Center. He is a member of the American College of Physicians. In addition to his medical activities he puts his law degree to good use, mainly for medicine-related cases.

1954
Anneliese Sitarz is in the final stages of computerizing the pediatric tumor file, which includes approximately 2,400 patients seen between 1946 and the 1980s. Babies Hospital was the main referral center for pediatric tumors in New York City at the time, so the file probably is representative of all of New York City.

1957
Roger J. Boulay, although officially retired, still participates in first-year medical education in the capacity of medical director of the Sidney Hillman Health Center of Strong Memorial Hospital. He is clinical professor emeritus of medicine and psychiatry at the University of Rochester. In 2000, he received the Edward Mott Moore Award for unusual and current service to the community, to the medical profession, and to the Monroe County Medical Society. • The U.S. Sports Academy gave its 2001 Dr. Ernest Johl Sports Medicine Award to Robert Leach. • Another Robert in the class, Bob Walzer, was made CEO of a charitable foundation by the will of a late friend; through this foundation he has created an Asian art gallery and collection at Emory University’s Michael C. Carlos Museum. The Emory museum is a short walk from the CDC, so Bob urges all alumni to visit this gem of a museum when visiting Atlanta.

1958
Gerard A. Kaiser is chief medical officer at Jackson Memorial Hospital and senior associate dean for clinical affairs at the University of Miami’s medical school.

1957
Gerard A. Kaiser is chief medical officer at Jackson Memorial Hospital and senior associate dean for clinical affairs at the University of Miami’s medical school.

1958
Louis M. Sherwood, senior vice president for medical and scientific affairs in the U.S. Human Health Division of Merck & Co. He is also adjunct professor of medicine at the University of Pennsylvania and visiting professor of medicine at the Albert Einstein College of Medicine. His former appointments have included those of chairman of medicine at Einstein and professor of medicine at the University of Chicago. A past president of the American Society for Clinical Investigation and the Association of Program Directors in Internal Medicine, he has been appointed to the clinical research roundtable of the Institute of Medicine and the National Advisory Council to the Department of Veterans Affairs.

1963
Richard A. Dickey practices medicine, with an emphasis on endocrinology, diabetes, metabolism, and obesity, in Hickory, N.C. A fellow of the American College of Physicians and the American College of Endocrinology, he is one of the founding members of the American Association of Clinical Endocrinologists and also its immediate past president. Richard is delegation leader for People to People Ambassador Programs. He led a delegation of endocrinologists to China in 2000 and to Russia, Hungary, and Cuba in 2001. The purpose of
these delegations is to share experiences and expertise and to offer advice regarding the practice of clinical endocrinology. Visitation includes all levels of care to engage the delegation and hosts in a broad cultural and professional exchange, fostering understanding and mutual interests.

1965
Stephen Kurtin received the Teacher of the Year Award from the Mount Sinai Medical Center, where he is assistant clinical professor of dermatology. • K.J. Lee, who is chief of otorhinolaryngology at the Saint Raphael Healthcare System in Connecticut, has been named president of the American Academy of Otalaryngology, Head and Neck Surgery Foundation. K.J. is involved in all aspects of otalaryngology, including the business and political aspects. In addition to pioneering a number of new surgical procedures he has invented about 12 new surgical instruments for use in otalaryngology. • Lynn Peterson is a practicing surgeon who teaches medical students at Harvard and residents at Brigham and Women’s Hospital, where he is in the process of establishing an ethics service. • Stuart Rose’s book, “The International Travel Health Guide,” is now in its 12th edition. He also runs a mail order company, now 12 years old, which is launching a new insect repellant.

1967
Ronald A. Allison was elected to the board of directors of the American Urological Association (West). • William M. Lee is at the University of Texas Southwestern Medical Center in Dallas, doing clinical trials in hepatitis, studying acute liver failure and drug hepatotoxicity. In August 2001, Bill was featured in an article on drug-induced liver damage that appeared in the Science section of the New York Times. His wife, Lisa, is in her 12th year as headmistress of the Hockaday School, the largest school for girls in the United States. • Robert M. Russell has been appointed director of the U.S. Department of Agriculture’s Human Nutrition Research Center at Tufts University; this is one of five national centers. Bob is also vice chairman of the Food and Nutrition Board, Institute of Medicine, National Academy of Sciences.

1971
Kenneth G. Jordan is president of a neuro-telemedicine company, operating out of Southern California. In 2001, Inland Empire Magazine of Southern California named him one of five “Top Docs.” • Eve E. Slater has been nominated by President Bush as assistant secretary of health and human services for health. She was formerly vice president for clinical and regulatory development at Merck Research Labs. Before that, from 1977 to 1983, she served as chief of the hypertension unit at Massachusetts General Hospital in Boston.

1972
Woody English considers himself a hospitalist. He received a master’s degree in management and is applying the skills and insight gained from studying systems, business, and leadership to clinical medicine. He writes: “I feel like an oiler in the engine room, experiencing the satisfactions of making improvements in clinical outcomes, patient safety, and operational efficiency.”

1973
Linda M. Sacks is co-director of nurseries at Memorial Health University Medical Center and tertiary neonatal director for the southeastern region of Georgia. Linda and husband Steve live in Savannah; they have three grown sons. In her spare time Linda writes poetry, much of it having a medical theme. • Daniel von Hoff has been director of the Arizona Cancer Center since 1999. In 2000 he was invited to give the Alan C. Sartorelli Lecture in Pharmacology at Yale University; he also received the Jeffrey A. Gottlieb Memorial Award as well as a fellowship from the National Foundation for Cancer Research. His major research is devoted to the prevention and cure of pancreatic cancer.

1974
Lester W Blair is president of the American Lung Association of New York. A pulmonologist and expert in critical care medicine, Les is associated with NYU and Bellevue. He is married to Hueldine Webb ’77. • Frederick G. Kushner completed a term as chairman of the credentials committee of the executive committee of the clinical cardiology council of the American Heart Association. He now serves as president of the New Orleans Friends of Music, a chamber music society.

1977
Stan D. Arkow is director of inpatient psychiatry at Columbia-Presbyterian. He also practices private psychiatry in Manhattan and Scarsdale, N.Y. His wife, Cindy Aaronson, received a Ph.D. in social work from Columbia in 2001.

1978
Julian Allen is chief of pulmonary medicine and the Cystic Fibrosis Center at Children’s Hospital of Philadelphia and professor of pediatrics at the University of Pennsylvania. His research interests include assessment of pulmonary function in infants and young children and the pulmonary complications of sickle cell disease.
1979
Paul Brandt-Rauf, professor in Columbia’s Mailman School of Public Health’s Department of Environmental Health Sciences, received the Robert A. Kehoe Award of Merit from the American College of Occupational and Environmental Medicine in the spring of 2001 for “outstanding leadership and significant work in cancer research.”

1980
Kathleen A. Delaney was promoted to full professor in the emergency medicine division at the University of Texas Southwestern Medical Center in Dallas. Robin Steinberg works at the Massachusetts Physician Peer Review and practices ophthalmology part time. On the side, she runs a women’s study group and is raising four children, ages 9 to 16. Her husband, Phil Gendelman, is also an ophthalmologist.

1982
A member of the American Society for Clinical Investigation since 2001, Mark R. Philips received a Burroughs Wellcome Fund Clinical Scientist Award in Translational Research in 2000. He is a faculty member at NYU.

1983
Randall H. Vagelos is an associate professor of medicine at Stanford University.

1986
Keith Fisher was elected president of the Texas Ophthalmological Association. Among his varied hobbies are playing in a swing band and working on an aviation rating for instruments. • See the Sept. 11 feature in this issue for information on James Jeng.

1987
Dawn McGuire, a neurologist, has become CEO of Eunoe Inc. (named for the river of remembering in Dante’s “Inferno”). Her research in Alzheimer’s disease involves a cerebral spinal fluid shunt-based technology intended to improve clearance of amyloid from the central nervous system.

1989
Erroll Crook was appointed chief of internal medicine at Harper University Hospital. Erroll has an extensive background in medicine, particularly nephrology. He is on the board of six medical journals. In June 2001 he received a Career Development Award from the VA. Harper University Hospital is a tertiary referring hospital and one of the primary teaching hospitals of Wayne State University’s medical school.

1992
After six years as a physician-educator at Massachusetts General Hospital, Davoren A. Chick and family relocated to the Midwest at the end of 2001. Her current title is medical director of internal medicine resident teaching services at Michigan State University. • See the Sept. 11 feature in this issue for information on Emil Chynn. • Scott W. Helm was appointed head of teaching for the Department of Anesthesiology clinical rotation at the University of Illinois medical school. He also serves on the school’s Critical Care Committee, the Medical Executive Committee, and the Finance Committee of his clinic, in which he is a partner. • William Macaulay was appointed director of the Center for Hip and Knee Replacement at Columbia-Presbyterian.
DOCTORS IN PRINT

“The Unkindest Cut of All”

By Barron H. Lerner ’86
Oxford University Press, 2001
383 pages
Reviewed by Peter Wortsman

Perhaps the most chilling quote in Barron Lerner’s incisive sociohistorical study of breast cancer treatment in the United States was related by a patient in 1976 to a popular author and women’s advocate. The patient repeated her surgeon’s take on preventive care. “If at a certain age, all women would have their breasts removed . . . there would not be all this anxiety and carelessness and cancer caused deaths.”

In this exhaustively researched and eminently readable book, Dr. Lerner, a 1986 P&S graduate, examines the surgical revolution first launched more than a century ago by the legendary William Stewart Halsted (P&S 1877) with radical mastectomy and subsequently challenged by a social revolution in our time led by the very patients Halsted sought to “cure.”

Halsted’s radical mastectomy was truly cutting edge back in 1882 when he first perfected the technique. Based on his scientific understanding of the physiology of the breast and his painstaking precision, Halsted, a brilliant surgeon by all accounts, made a bold assault that came to be recognized as the established and standardized procedure for the dreaded disease over the next three quarters of a century. Yet few thought to question the premise of his operation, that radical early intervention nipped the disease in the bud.

At Columbia, an illustrious “Halstedian,” Cushman D. Haagensen, a rigorous and committed clinician who was considered America’s first “breast specialist,” promoted breast self-examination and urged sensitivity on the part of physicians. He too firmly believed in the necessity for radical surgery. Anything less, he insisted, was “surgical cowardice.”

Arthur Purdy Stout, developed the Columbia Clinical Classification System to classify the virulence of breast cancers and determine which were thought to be operable. In the post-World War II era, the terminology used to describe surgical response to breast cancer took on a bellicose tone that has stuck ever since. Surgeons led the charge and patients were recruited to take part in the “cancer war” effort.

But breast cancer proved wiler than the knife and some patients refused to grin and bear the inevitability of the consequences. To the medical profession by and large, the fact that countless women were mutilated in the process was an unfortunate, if necessary, sacrifice for the “cure.” As Dr. Lerner points out, physicians “proved as unable to address . . . variability in women’s responses to breast cancer as they were unable to acknowledge the biological variability of the disease.”

Things began to change when biostatisticians started questioning the outcomes of radical surgery and biometricians suggested that “the inherent biology of individual breast cancers—as opposed to early intervention—most influenced whether patients lived or died.”

In the early 1970s, a few outspoken high-profile patients, First Lady Betty Ford, Happy Rockefeller, and former child star Shirley Temple Black helped shift issues of breast cancer treatment from the private to the public sphere. Rebel surgeons with a cause like Barney Crile proposed and practiced less extreme alternatives to radical mastectomy. And informed journalist-patients like Babette Rosmond, Betty Rollin, and Rose Kushner helped spread the word and educate the public to surgical options, including postoperative breast reconstruction.

The new tools offered by genetics to predict disease, i.e., blood tests for genetic mutations BRCA1 and BRCA2, proved a tantalizing crystal ball to some and a sword of Damocles to others. Breast cancer, the author soberly reminds us, is “still the most common non-skin cancer of American women.”

“Why did the radical mastectomy achieve such prominence and then remain so popular?” Lerner asks. Society and the medical establishment, he suggests, were locked into a Cold War mind-set, committed to bold, big-gun maneuvers against an invisible enemy with, at best, a passing concern for the “collateral damage.” The bellicose metaphor that helped shape the response, Lerner implies, may have proved as virulent as the disease.
ACROSS
1  Diet
5  Sloughs
9  Type of septum
14  Turkish leader
15  Touch
16  What to do with an ointment
17  Lues cause
19  — sinus (lacrimal sac depression)
20  Caffeine source
21  Soothing ointment
22  Yes or no follower
23  Plague cause
25  Body type
26  Blood clotting abbr.
27  Summer mo.
28  Kind of a nut
31  Balsam of Peru user?
33  Lip- ---
36  What to do with an ointment
37  Turkish leader
38  Touch
39  They had medicine men
40  Not in operation
41  Stage of metamorphosis
42  Where to find Muscat-eers
43  Drs. often have one of these numbers
44  Skin disease medication ingredient
45  Ca++ is one
47  Defaces
49  Lyme Disease cause
50  Chiropractor’s concentration
51  They had medicine men
52  Not in operation
53  Stage of metamorphosis
54  Where to find Muscat-eers
55  Drs. often have one of these numbers
56  Skin disease medication ingredient
57  Ca++ is one
58  They had medicine men
59  Not in operation
60  Stage of metamorphosis
61  They had medicine men
62  They had medicine men
63  They had medicine men
64  They had medicine men

DOWN
1  Lipomatous
2  Come around
3  Trim
4  Obtain spinal fluid
5  BRAT diet part
6  Printing daggers
7  Sign of lues
8  Penn, e.g.
9  Early parental job
10  Disjointed
11  Vincent angina cause
12  Safe from the elements
13  Orpheus played one
14  Final notice
15  It’s often fattening
16  Type of tire
17  Grandma Moses
18  Radius neighbor
19  Put on weight
20  Footnote abbr.
21  Lymph station
22  Salpingitis cause
23  It may cause pain on walking
24  Peke squeak
25  Oxidizing agent
26  Cramp
27  Counts on
28  Parts of 65-Across
29  Whales
30  In the clouds
31  Like bar aroma?
32  Key of Florida
33  Occipital protuberance point
34  Saw
35  Totals
36  Born
37  Ingest
38  Oxidizing agent
39  Parts of 65-Across
40  Whales
41  In the clouds
42  Like bar aroma?
43  Key of Florida
44  Occipital protuberance point
45  Saw
46  Totals
47  Born
48  Ingest
49  Oxidizing agent
50  Parts of 65-Across
51  Whales
52  In the clouds
53  Like bar aroma?
54  Key of Florida
55  Occipital protuberance point
56  Saw
57  Totals
58  Born
59  Ingest
60  Oxidizing agent
61  Parts of 65-Across
62  Whales
63  In the clouds
64  Like bar aroma?
65  Key of Florida
66  Occipital protuberance point
67  Saw
68  Totals
69  Born
70  Ingest

Answers in Next Issue

GERMANE?
By Arthur S. Verdesca ’55