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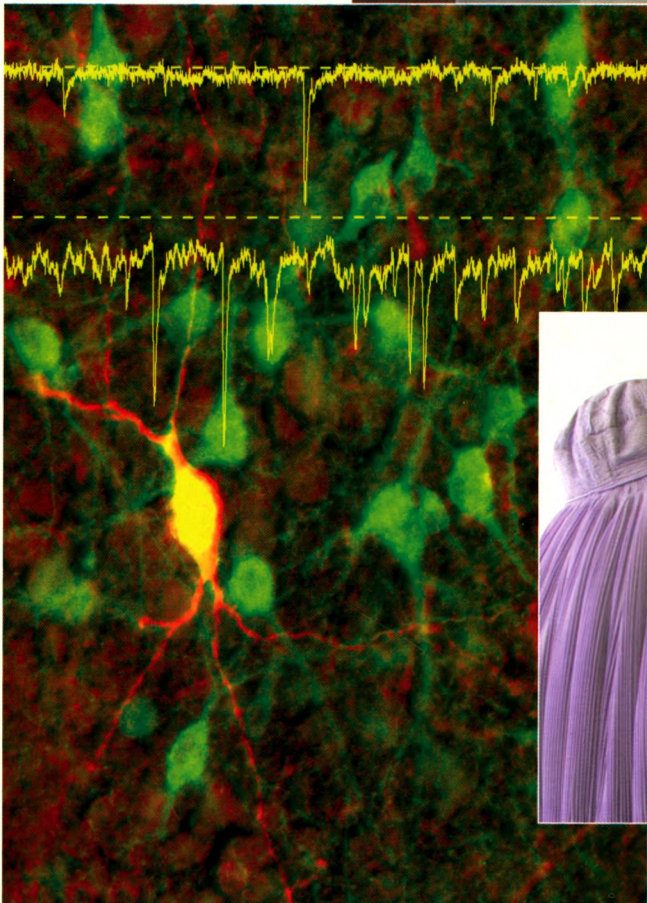
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Chironian

New York Medical College



Fall/Winter 2002

INSIDE

How Orexin Wakes the Brain
Full Service Transplantation
Alums Help Afghanistan Heal

NARCOLEPSY

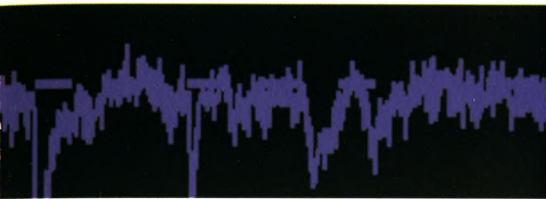
THE OTHER SIDE

OF SLEEP DISORDERS

Christopher S. Leonard, Ph.D., and colleagues strive to understand the role of cholinergic neurons in sleep to help narcoleptics who can't stay awake.

Sleep, that universally revered and cherished part of our biological rhythm, is prized for its capacity to refresh and restore the human body and spirit. But as we age, menopause and prostate problems often interfere with this nightly bliss. The loss of this ability to fall fast asleep and remain in undisturbed slumber can result in incomparable misery. It was not so long ago that insomniacs relied on homespun advice to get relief by drinking a glass of warm milk and not exercising or getting excited before bedtime. Medical science, however, does not abide a vacuum. There are centers that have sprung up far and wide where clinical psychiatrists and psychologists combine psychology and electronics in a quest to understand and treat sleep/wake disorders.

Basic scientists have also been busy working to understand how the brain generates waking and sleeping. While there is still a long way to go, considerable progress has been made in identifying brain structures and neurochemicals that are key players in this nightly neuronal drama. At New York Medical College, Christopher Sean Leonard, Ph.D., associate professor of physiology, concentrates on receptors and ion channels that populate part of the neural switch for controlling sleep.



Modulatory neurons

"The Holy Grail for us is to discover a substance that can provide the restorative function of sleep, but without the downtime. This would allow people to operate all the time at peak efficiency without sleeping," Dr. Leonard explains. The military is interested in this for obvious reasons...

"As a cellular physiologist I began studying how cells work and especially, how nerve cells [neurons] communicate and information gets coded in the central nervous system. The vast majority of neurons in the brain are specialized for high speed processing of information, such as those in the visual system, which must accurately encode the intensity and motion of stimuli." However there also are other neurons specialized for slower modulatory roles, and they can completely change how the information processing neurons work. "Indeed, these appear central to controlling waking and sleeping. But a lot less is known about these modulatory neurons since there are few of them and they are hard to find," Dr. Leonard says.

Cataplexy, too

Ah, but Dr. Leonard does know *how* to find them and why they are important. His newest interest is narcolepsy, a life-altering sleep disorder that results in a patient falling asleep uncontrollably throughout the day. Moreover, narcoleptics often suffer from an accompanying condition called cataplexy, which causes them to collapse in a heap on the ground, conscious and all but paralyzed.

"I'm interested in understanding how the brain makes us sleep and wake, how it produces these vast changes of



ABOVE: Physiologist Christopher S. Leonard, Ph.D., takes time out from the patch-clamp rig he uses for making sensitive electrical measurements from neurons in order to assay the activity of receptors and ion channels.

consciousness and why we undergo these changes from the neurologic point of view," Dr. Leonard begins. Specifically, he targets the cholinergic neurons found in the brain stem and the basal forebrain. Defined as neurons that can synthesize the neurotransmitter acetylcholine, cholinergic neurons seem to be pivotal in establishing REM sleep and wakefulness. "There is lots of evidence that the hyperexcitability of these neurons causes an abnormal release of acetylcholine, which somehow triggers a cataplectic episode," he says.

A new peptide

Recently there has been rapid progress in understanding the neural basis of

narcolepsy. "About three years ago, two different laboratories wrote up animal studies that appeared in the journal *Cell* within weeks of each other," Dr. Leonard continues. "Both had discovered that a peptide system never before linked with sleep and wakefulness was central to narcolepsy." A team at Stanford discovered that the gene for canine narcolepsy was a defective receptor for the neuropeptide *hypocretin/orexin*. The second group from the University of Texas Southwestern Medical Center at Dallas, which had previously co-discovered the peptide, followed with animal studies establishing that loss of the peptide produced narcolepsy in test mice. (Hypocretin

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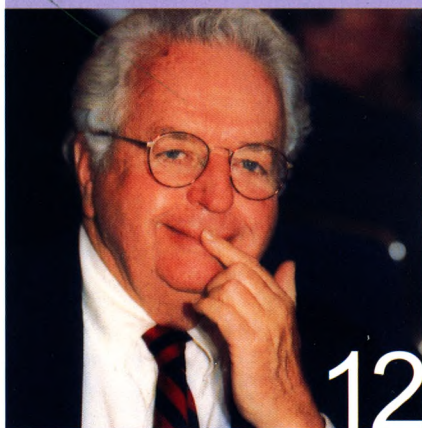
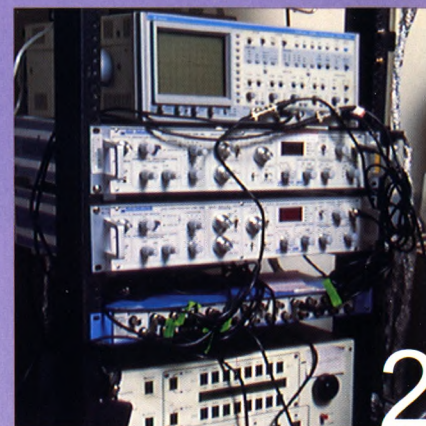
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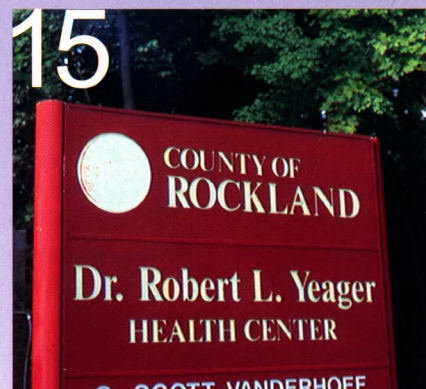
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On the Cover:

This digital image from a brain slice demonstrates that the neuropeptide hypocretin/ orexin can excite cholinergic neurons (green dyed cells) that make the neurotransmitters acetylcholine and nitric oxide and play a key role in maintaining wakefulness. The electrical recordings at the top show activity from the neuron filled with red dye. Since the neuron also contains green dye, it appears yellow. Activity before (upper) and after (lower) hypocretin/orexin has been applied to the neurons reveals one way that orexin wakes the brain, a reaction absent in patients with narcolepsy.

Up and coming stars in the Department of Surgery are, from left, Elias Z. Zias, M.D., '89, who initiated a research program for the cardiothoracic division, and Laszlo Fuzesi, M.D., director of heart transplant at Westchester Medical Center.

Practicing emergency medicine in Afghanistan under the auspices of the U.S. Army gives new meaning to the specialty for Gerard P. Curran, M.D. '95.

CORRECTION: The Department of Surgery at New York Medical College was founded in 1860 by Jacob Beakley, M.D. Our thanks to Catherine N. Hinterbuchner, M.D., professor and chair of the Department of Rehabilitation Medicine, for bringing the error in the Spring/Summer 2002 issue of *Chironian* to our attention.



FACULTY SAVVY AND RESEARCH GET HEART TRANSPLANTATION OFF TO A GOOD START AT WESTCHESTER MEDICAL CENTER

Surgery + Medicine + Luck Getting a Heart = SURVIVAL

You may not remember where you were, but if you are of a certain age you have not forgotten the Sunday morning you heard that a South African surgeon named Christiaan Barnard had performed the first heart transplant on a human being. For those too young or not yet born, it happened in December 1967, when the handsome, 45-year-old cardiothoracic surgeon parlayed years of training by transplanting hearts in dogs into a milestone event, it seemed, that would rival Edward Jenner's discovery of vaccination. The recipient of the heart was Louis Washkansky, 55, suffering from diabetes and incurable heart disease, who lived 18 days before dying of double pneumonia as a result of his suppressed immune system.

Fast-forward to December 2002 and the 140 centers in the U.S. with the credentials to perform heart transplants. Westchester Medical Center, an academic medical center of New York Medical College that shares the Valhalla campus, is among the newest with five cases. It joins six others in New York where the 175 heart transplants performed in 2001 make it the fourth busiest state in the nation. The statistics are provided by the United Network for Organ Sharing (UNOS) Organ Center, which recently celebrated 20 years of continuous operation. The organization was founded on the need to find kidneys and to pay for the cost of transporting them. It has been even more difficult to get hold of antigen-matched hearts.

PHOTO ABOVE: Patients in heart failure can be tracked by this new Bio-Z machine, which measures hemodynamics (blood flow) and fluid in the body. The machine provides a valuable, objective and non-invasive measurement of a patient's progress, according to Warren Rosenblum, M.D., medical director of the transplant team at Westchester Medical Center.

Chironian

New York Medical College

Writer/Editor:

Marjorie Roberts
Director of Public Relations
E-mail: marjorie_roberts@nymc.edu

Alumni Liaison:

Andrea Kott
E-mail: chironian@nymc.edu

Rev. Msgr. Harry C. Barrett, D.Min., M.P.H.
President and Chief Executive Officer

Ralph A. O'Connell, M.D.

Provost and Dean, School of Medicine

Francis L. Belloni, Ph.D.

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Design:

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Principal Photography:

Philip Jensen-Carter

Please direct all inquiries to:

New York Medical College
Chironian
Valhalla, New York 10595

<http://www.nymc.edu/chironian>

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Chironian is published semi-annually by
the Office of Public Relations (914) 594-4536.

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Short history

The groundwork had been laid for heart transplantation by two surgeons, Frenchman Alexis Carrel and the Russian S.V.P. Demikhov, who devised experiments that proved the feasibility of transplanting an organ. Carrel lived at the turn of the century while Demikhov did his work in the late 1940s, but it was not reported in the West until 1962. The advent of techniques for open-heart surgery and the invention of the cardiopulmonary bypass machine in the

exciting, as well as the invention of devices to keep a patient alive while waiting for a heart. The only unexpected thrills are those the surgeon sometimes is subjected to due to the lengths he must go to pick up the heart.

Not by UPS

Elias Zias, M.D., '89, assistant professor of surgery at New York Medical College, is a cardiothoracic surgeon and a member of the transplant team. In September he flew in the middle of the night by helicopter to Allentown, Penna., to pick up a heart. The donor was an 18-year-old victim of a traffic accident; the recipient also was 18, with a congenital heart defect that had resulted in many surgeries at WMC. This very well paid deliveryman—when it absolutely, positively had to be there overnight (with apologies to FedEx)—is in his third stint at the College: medical school graduate, surgical resident and faculty member. Dr. Zias went on to do two fellowships, a cardiothoracic surgery fellowship at Montefiore Medical Center in the Bronx, and a cardiovascular thoracic surgery fellowship

at Children's Memorial Hospital in Chicago. Besides his considerable research efforts he has performed more than 300 surgeries in 2001 alone, including valve and bypass, minimally invasive (beating heart) in cardiac, thoracic and vascular sites, and serving as a worthy first mate for Laszlo Fuzesi, the transplant surgeon who came aboard in December 2001.

Laszlo Fuzesi, M.D., associate professor of medicine, is director of the Heart Transplant Program at WMC. He was headed for this specialty the day he left medical school at Cornell University Medical College in New York City. Following an internship and residency in surgery at Thomas Jefferson University in Philadelphia, and a residency in cardiothoracic surgery at The Presbyterian Hospital in New York City, he took a research fellowship in cardiac transplantation at Columbia University. As surgical director of the cardiac transplant program at Newark Beth Israel Medical Center in New Jersey since 1990, he performed some 300 heart transplants, 30 lung transplants and surgeries involving more than 100 cardiac-assist devices.

Organ Procurement and Transplantation Network

Heart Transplants Performed: January 1, 1988–June 30, 2002

All Donor Relations

All Centers	66
Albany Medical Center Hospital	8
The Presbyterian Hospital in New York City	33
Strong Memorial Hospital	5
Montefiore Medical Center	4
Mount Sinai Medical Center	13
Westchester County Medical Center	3

Source: United Network for Organ Sharing

1950s were the stepping-stones to ingenious laboratory studies that were critical to blood typing and the matching of organ to recipient. As the decade ended, the surgical technique that is still being used today was developed by Richard Lower and Norman E. Shumway at Stanford University. All that was missing was effective immunosuppressive therapy. The development of the drug Cyclosporin filled that niche and took the guesswork out of post-transplant medical care. Though the odds of living significantly longer after transplantation were poor at first, the numbers tell a different story now.

One patient is still alive after 24 years. Heart transplants performed with 1-, 5-, and 10-year survival figures are now approaching 90 percent, 70 percent and 50 percent, respectively. In fact a transplant has almost become routine and ordinary. It is the intensity and quality of aftercare that is critical and



ABOVE: Laszlo Fuzesi, M.D., director of heart transplant at Westchester Medical Center, had transplanted more than 250 hearts, 30 lungs and performed 100 surgeries to implant cardiac assist devices by the time he arrived in 2000. It is the second start-up for the former surgical director of the transplant program at Newark Beth Israel Hospital, New Jersey's only transplant program.

BETTER THINGS FOR SURGERY, THROUGH RESEARCH

Surgeons have always had the bad rap that all they want to do is cut and then they're gone. This dig, however, does not fit Elias Zias, M.D. '89, assistant professor of surgery and a member of the heart transplant team. The tireless and demanding cardiothoracic surgeon is responsible for initiating a research program within the Division of Cardiothoracic Surgery. At last count the team comprised two clinical coordinators, two full-time surgeons doing research in animals, a pediatrician, a secretary, and collaboration with Kenneth Lerea, Ph.D., associate professor of cell biology and anatomy. Other alliances are in the works, but "I'm not in a position to reveal anything yet," he says, barely able to contain and conceal his enthusiasm.

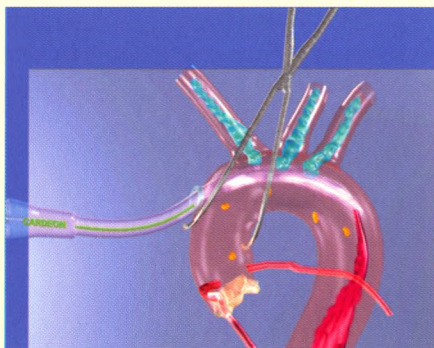
At present he is principal investigator for six studies, mostly multi-center trials:

- "Vasoreactivity of Arterial Grants to Vasopressors"
Funding is internal.
- "Cerebral Optimization by Regionalization of the Aorta: A Randomized Study of Targeted Circulatory Management (TCM): Cardeon TCM-Cobra Catheter Trial"
Funding by Cardeon.
- "Cardiopulmonary Bypass"
Funding by Procter & Gamble.
- "The MOSAIC Bioprotheses Efficacy & Longevity Trial"
Funding by Medtronic.
- "A Phase III, Multi-Center, Randomized, Double-Blind, Placebo-Controlled Trial of the Ex-Vivo Treatment with CGT003 of Coronary Vein Grafts—Bypass Graft Procedures"
Funding by Corgentech.



ABOVE: Elias Z. Zias, M.D. '89, cardiothoracic surgeon and member of the transplant team at Westchester Medical Center, has initiated a research program for the Division of Cardiothoracic Surgery, Department of Surgery, at the College.

- "Modified Condensed Cardiopulmonary Bypass: Safety and Feasibility" Animal study with funding by Somanetios.



ABOVE: The Cardeon Cobra Catheter is a new entry in the effort to prevent strokes that occur as a result of heart bypass surgery. Elias Zias, M.D., has used the device in some 140 operations with very promising results. Its ability to deliver cooled blood to the brain and warmed blood to the heart during a procedure is being tested at 20 centers in the U.S.

"These trials are extremely important for the very sick patients who are disabled due to congestive heart failure and unable to function," says John A. Savino, M.D., professor and chairman of the Department of Surgery, "The cardiothoracic division, with its large volume of cases, is thus afforded an excellent opportunity to explore these new techniques to salvage critically ill patients. This is consistent with a departmental initiative to perform research in areas where we already have clinical superiority, and the expectation is that these efforts of the cardiac and cardiothoracic teams involved will contribute greatly to benefit these patients."



ABOVE: Heart transplant recipient Niall Maguire, right, of Putnam Valley, N.Y., represents the fruits of his labors to Matthew Pravetz, O.F.M., Ph.D. '88—theoretically, that is. As director of the Alumni Gross Anatomy Laboratory, Associate Professor Pravetz introduces medical students to their cadaver patients at commencement of the initial course of the curriculum. Maguire is the end product of a number of advances in medical science. A defibrillator saved his life, and a cardiac assist device kept him going until a transplant was able to give him back a life.

Takes time

"It takes five or six years to establish a transplant program," Dr. Fuzesi declares of his second time around in starting one. "People have to be patient. Sometimes if you rush things it affects the outcome. Heart surgery has been here a long time and we're just adding another tool to the armamentarium... Westchester had everything but heart in its transplant program. Now we have a full house and the ability to manage end-stage heart disease."

At Newark Beth Israel, he not only developed New Jersey's only transplant program, but also recruited, initiated and developed the mechanical systems involved in holding off end-stage heart failure. Once considered only as a bridge to transplant, these heart assist devices are now being evaluated for permanent use. They include the left ventricular assist device (L-VAD), the HeartMate and the AbiCor. So far the results have been mixed. (The FDA approved the HeartMate in November

as a permanent treatment for patients too sick for transplants.)

"I still believe assist devices are better than total artificial replacement," Dr. Fuzesi admits, "because we're still having trouble with them because of strokes and infection."

Aftercare

The third peg in the triumvirate is Warren Rosenblum, M.D., who left the University of Pittsburgh School of Medicine to join the WMC transplant team in June. As its medical director as well as overseer of all patients in heart failure and post transplantation, Dr. Rosenblum deals mostly with patients in severe heart failure

who have been referred by cardiologists. (After they are stable, he insists they return to their referring cardiologist for continued care.)

Following graduation from the Albert Einstein College of Medicine in the Bronx, Dr. Rosenblum did his internship, residency and fellowship in heart transplant medicine at The Johns Hopkins University. For two decades, the internist who is also certified in cardiovascular diseases, has been studying the neuro-hormonal mechanisms of congestive heart failure in order to modify the body's response through molecular immunology. "I was looking at using gene therapy in preventing transplant rejection, and the role of cytokines and dendritic cells to prolong graft survival," he says. "I've been building up a large human heart tissue bank, with close to 300 samples given with consent by patients, in order to identify changes in the levels of gene expression measured at the point of *most severe* versus *clinically improved*—at the time of transplant."

Eager to resume his research, he is working on getting lab space now that the hospital service is up and running.

His job

Following a hospital stay of only eight to fifteen days, the recipient of a new heart can have a normal quality of life after staying home for only six weeks. "Nobody leaves the hospital without one clean biopsy," Dr. Rosenblum explains, to make sure there are no signs of rejection or infection. After that weekly biopsies become monthly and then are done every three months. "If everything is all right after five years, we could stop them altogether," says Dr. Rosenblum. "We do the biopsies through a vein in the neck into the right ventricle to look for signs of rejection before symptoms even occur."

The living proof is Niall Maguire, 56, of Putnam Valley, N.Y., recipient of the first heart successfully transplanted at Westchester Medical Center. (The first candidate died from renal and vascular conditions that had nothing to do with the surgery.) When the Irish gentleman was brought by ambulance from Putnam County he was dying in heart failure. A ventricular assist device saved his life, and after a couple of months, he was ecstatic when the call came that a heart in Queens was a match. After 10 days in the hospital, the spunky Maguire went home.

Six weeks later he was back behind the wheel of the limousine he drives to airports, theatres and all those places his customers don't want to. Armed with anti-rejection medicine and steroids, Maguire has added forty pounds and says he feels as well as the day he immigrated to America at the age of 18. Only one thing bothers him. He had requested and received the name and address of the donor's family, which is permitted one year after transplant. Contacting the family is something he wants to do, but just can't. "I've got to do this," he knows, "but I'm just not ready, you know, to thank them for giving me a second chance at life." ■

PHARMACOLOGIST UNCOVERS THE TRUTH ABOUT ALDOSTERONE

Charles T. Stier, Jr., Ph.D., uses ACE inhibitors to blunt the effect of the adrenal hormone in hypertension and congestive heart failure.

There's an old saying that there is always something new to learn, even if you are an expert in the area. In medical science this is a certainty, where long-standing beliefs are regularly expunged and new insights revealed to researchers who often spend their entire careers in one field of study. Blood pressure (BP) is a good example. Rev. Stephen Hales of England was the first to measure it more than 300 years ago by sticking a glass tube in an artery of the neck of an obliging mare. Physicians knew little about the pathogenesis or implications of untreated hypertension until the late 1970s, when they began to recognize it was a major coronary risk factor. Under the auspices of a national committee dedicated to its research, hypertension was divided into three levels: mild, moderate and severe, which later were renamed stages I, II and III. That group, imperially named the Joint National Committee on Prevention, Detection, Evaluation and Treatment of Hypertension, also established a BP of 140/90 mm as a threshold, but reduced the number to 130/85 for those with diabetes; organizations

ABOVE: Charles T. Stier, Jr., Ph.D., associate professor of pharmacology, has written numerous papers on his NIH funded research showing the positive effects that ACE inhibitors and angiotensin receptor blockers have in preventing vascular injury. His recent studies indicate that blocking aldosterone receptors can have a major impact on reducing myocardial infarction, stroke and kidney failure in hypertensive rats.

devoted to kidney and diabetes research further lowered the number to 130/80 for patients with those ills.

Drugs help

And so began the search for antihypertensive medications that could lower blood pressure when drugless options such as weight loss and exercise failed, either because patients wouldn't or couldn't comply. Without medication, this silent disease presenting no symptoms even while it is causing life-threatening or fatal damage, continues to undermine the cardiovascular system and prime the body for a heart attack, kidney disease or stroke.

When Charles T. Stier, Jr., Ph.D., became a member of the New York Medical College Department of Pharmacology in 1981, he joined a group of investiga-

tors who live and breathe the study of cardiovascular disease in general and hypertension in particular. Recruited by John McGiff, M.D., (see story on page 12), professor and chairman, Dr. Stier left the University of North Carolina at Chapel Hill where he was an NIH postdoctoral fellow before becoming an instructor in physiology. The associate professor has spent 20 years at the College, half the time busy with teaching and curriculum duties for the medical and basic science students to be served. The other 50 percent of his time he covets for research, for the most part funded by the NIH. His present grant for \$910,724 entitled "Prevention of Stroke Dysfunction by ACE Inhibitors" runs until September 30, 2003. ACE (angiotensin-converting enzyme) inhibitors are now a mainstay in the treatment of hypertension, hav-

ing become a key component of the cardiologist's armamentarium for combating heart failure, and proving effective in preventing the loss of protein in the urine. It was Dr. Stier's studies in rats with hypertension that offered the first compelling evidence that ACE inhibitors could prevent damage to the heart, kidney and brain without lowering blood pressure.

Diuretics first

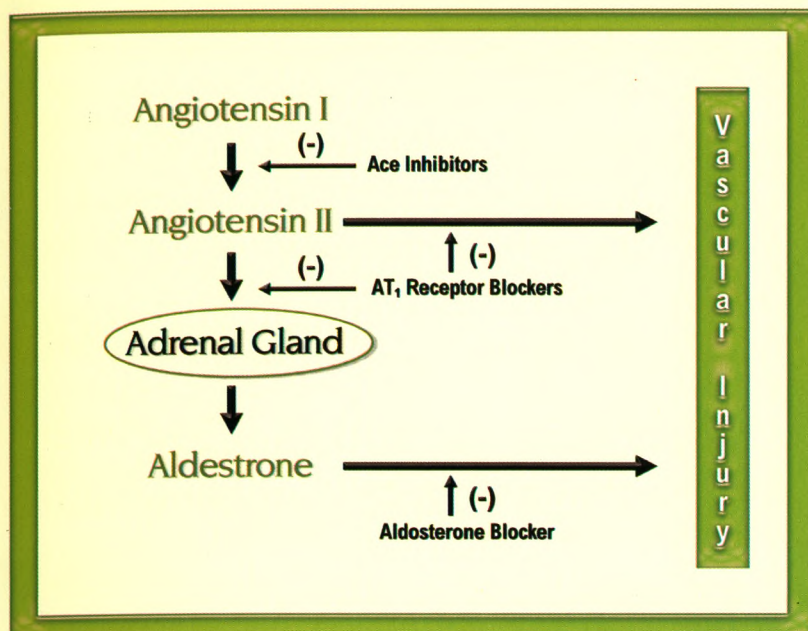
Medical progress doesn't exclude the use of tried and true remedies, and so it is that alone or together with newer therapies, a diuretic is usually the first drug to be prescribed. It brings blood pressure down by reducing the volume of fluid the heart has to pump through the body, provided there is no underlying disease to preclude its success. Beta-blockers, which slow the heart and reduce the force of its contractions, may also be an initial drug of choice for patients who already have had a heart attack or are known to have coronary artery disease.

A cardiologist also selects from vasodilators and calcium channel blockers, blood vessel relaxers and angiotensin receptor blockers that work in a similar way to ACE inhibitors. But all of these drugs must be prescribed selectively due to their side effects, and that is especially true for ACE inhibitors, which can cause a stubborn cough, a rash and in fewer than 1 percent, angioedema, a swelling of the neck that can result in suffocation. But despite the drawbacks, ACE inhibitors rate as first choice for the treatment of hypertension and congestive heart failure, and have great potential in other situations, Dr. Stier claims. He modestly mentions being "the first to elucidate the process of what else they can do."

The use of ACE inhibitors following a heart attack was validated recently in an article by Lawrence K. Altman, M.D., in *The New York Times*. His November 26th column "The Doctor's World" in the "Science Times" section made mention of their inclusion in guidelines for treatment by the American Heart Association as well as the American College of Cardiology.



ABOVE: Weighing out 200 mg of spironolactone on an analytical balance in his laboratory, Charles T. Stier, Jr., Ph.D., uses the synthetic steroid as an aldosterone receptor blocker. His ongoing studies of aldosterone suggest the adrenal hormone not only leads to hypertension, but also to vascular pathology.



The schematic diagram illustrates how therapeutic interventions can protect against vascular injury and the inevitable stroke, coronary or kidney damage. Dr. Stier used hypertensive rats that spontaneously develop strokes to test the effectiveness of ACE inhibitors and AT₁ (angiotensin-1 converting enzyme) in providing protection against vascular injury. After observing a minimal lowering of blood pressure, he considered the possibility that Ang II (angiotensin receptor blocker) was working through its known potent action to stimulate the release of aldosterone by the adrenal glands. Dr. Stier persistently treated the animals with aldosterone receptor blockers such as spironolactone and eplerenone, noting marked beneficial effects. These studies identified aldosterone as a major cause of organ damage in the animals.

Real benefit

Dr. Stier has found that ACE inhibitors can prevent myocardial infarcts, strokes and kidney damage due to its ability to diminish the formation of aldosterone, a relatively new villain in heart disease. Aldosterone, an adrenal hormone, is a refugee from the evolution to terrestrial life. Leaving behind the sea—a continuous source of salt and water—meant adapting to land and developing mechanisms to preserve salinity. Aldosterone, the main sodium-retaining hormone released by the adrenal glands and a big player in the body's system to regulate blood pressure, fits the bill. It does its dirty work by increasing the reabsorption of sodium and water in the kidneys at the same time it is stimulating the excretion of potassium—all causing blood pressure to rise. Equally as destructive is the manner in which it lures calcium into blood vessels, although this process does not involve the kidneys.

Vascular disease affects every layer in a blood vessel—endothelium, smooth muscle and adventitia—and aldosterone negatively influences all of them. Dysfunction of the endothelium (inner layer) has been linked to an

increased risk for cardiovascular events, to blood vessel stiffness and constriction of the smooth muscle layer. In the adventitia, there is evidence that aldosterone can induce fibrosis in the heart and vessels. The resulting vascular stiffness can cause systolic hypertension, recently recognized as a major insult for people over the age of 50. What's more, aldosterone can intensify blood clotting; the consequences include tissue ischemia, infarction and fibrosis.

Receptors and blockers

One aldosterone blocker Dr. Stier works with is spironolactone (Aldactone), a synthetic steroid with a structure so similar to that of aldosterone that it can act as a competitive antagonist at aldosterone receptors. "Although it is not a first line agent for the treatment of hypertension," Dr. Stier advises, "spironolactone has been reported to produce marked blood pressure lowering that may not be accompanied by the fluid and electrolyte loss some others of its type cause."

His antagonist of choice actually is eplerenone (Inspra), an aldosterone receptor antagonist with the moniker selective aldosterone blocker (SAB).

So promising is this drug it received FDA fast track approval in September due to the "great therapeutic value it showed in preventing cardiovascular disease and associated end-organ damage," he advises. And it is effective without displaying spironolactone's occasional side effects of menstrual irregularities, impotence and gynecomastia, the over development of male breasts. "Although Inspra was approved only for use in hypertension, there are several ongoing trials now that suggest other indications are in the wings," says Dr. Stier, "and that is very exciting." In one trial Inspra is being tested as a post-coronary therapy, he reveals, and he should know from having assisted the manufacturer, Pharmacia, in the basic science studies that indicated it had the potential to be a cardiovascular agent.

Dr. Stier has worked before with prominent pharmaceutical companies in regard to animal studies. "I never do an experiment with the thought of developing a drug," he says, "but that has been the case with eplerenone. Researchers don't think that what they are doing will necessarily be used on patients, but if it happens, it happens." ■

PHARMACOLOGY CHAIR

Fashions a
Department in
His Image

"It's the mechanisms," says John C. McGiff, M.D., that keeps him engaged and engrossed in the study of cardiovascular disease.

John C. McGiff, M.D., professor and chairman of the Department of Pharmacology since 1979, doesn't ask for much. All he wants is the clout to recruit exceptional scientists who are as passionate about cardiovascular research as he is, the freedom to run his laboratory without interference, and enough spare time to emulate an undergraduate on spring break. Actually, Jack McGiff doesn't really ask, he tells. Though he speaks softly and chooses his words with exquisite care, he often resorts to strong and irreverent language in making his point. Yet he is not big on self-promotion. Dr. McGiff will not pose for photographs, with one exception; he may assent as a compliment to another person in the picture. But even when he does consent, a smile is not part of the deal. Such is life in the world according to McGiff, where it is de rigueur to bring a dachshund to work and give her the run of the office. What is more, he readily admits to smuggling Lucia into many a fine restaurant, happily ensconced in a carrier he hides under the table.

In a nutshell, Dr. McGiff is a resolute, uncompromising and sovereign scholar who sets the pace in Pharmacology as surely as if he waved a checkered flag to start the day. One of six basic science departments at New York Medical College, Pharmacology is granted more research dollars than any other. The research faculty, who also teach what amounts to the last course in the second year of medical school, are convinced that Pharmacology is the most valuable.

How things work

In the clinical arena, Pharmacology has been the basic science leader in bench-to-bedside collaborations, such as the ongoing study by researchers in gene therapy and the hematologic oncologists who try fervently to control leukemia. Yet, as the bioscience most folks can relate to, pharmacology—which investigates the effects of drugs on living organisms—is not what turns on Dr. McGiff.



ABOVE: As a favor to his disciple Michal L. Schwartzman, Ph.D., John C. McGiff, M.D., agreed to be photographed for an article on Dr. Schwartzman in the previous issue of *Chironian*. Dr. McGiff has been the architect of the Department of Pharmacology for the last 23 years.

“I have always received support from administration.

There have been no barriers to academic pursuits. This proved to be an environment that allowed the department to develop along the best possible paths and I've been able to recruit first class scientists.”

“Mechanisms,” he says. “I like mechanisms. The goal in science is to follow the next lead because there is no end. Knowledge is an end in itself...To discover a new drug? Oh, I'm pleased when it happens, but that's for someone else to do. I work on lipid modulators and the mediators of basic mechanisms.”

In the 1990s Dr. McGiff began focusing on the relationship of vasoactive hormones to eicosanoid (fatty acid)-dependent mechanisms regulating vascular tone (constriction or dilation), and salt and water excretion. His work focused on the physiology and biochemistry of novel metabolites of arachidonic acid derived from enzymes called cytochrome P450 monooxygenases in the kidney and blood vessels.

Against the tide

“We were a voice crying in the wilderness,” says Dr. McGiff. “Cytochrome P450 and arachidonic acid metabolism—we started this field in terms of its extension to cardiovascular and renal studies based on a suggestion of Dr. Nader Abraham to a very bright Ph.D. student, Dr. Nicholas Ferreri, now a staff member of the department. It's the third pathway of arachidonic acid metabolism.” (For the Ph.D.s in the reading audience, the first and second pathways

are cyclooxygenase and lipoxygenase.) Since 1985, Dr. McGiff and his team have been investigating the vascular and renal mechanisms of blood pressure regulation. An initial NIH Program Project Grant for “Hormonal Regulation of Blood Pressure” was earned by Dr. McGiff, with an assist from Drs. Michal L. Schwartzman and Mairead Carroll. Dr. Alberto Nasjletti took over as principal investigator of the grant in 1995. He will be courting another renewal in 2005, when the grant will be 20 years old and a fifth five-year term is sought for funding. This is what Dr. Nasjletti has to say about his friend and boss:

“Jack McGiff is one of a kind, a passionate scientist with the soul of an artist, a man not bound by conventions who is always ready to stand up for what he believes; a fair, sensitive and generous friend and colleague who often hides behind a rough exterior; a man for all seasons who approaches life and work with the enthu-

siasm of a 20-year old. We are fortunate to have Jack McGiff as our chairman. I have no doubt that he is tops!"

Dr. McGiff feels the same way about his superiors: "I have always received support from administration. There have been no barriers to academic pursuits. This proved to be an environment that allowed the department to develop along the best possible paths and I've been able to recruit first class scientists, including colleagues from the '70s," says Dr. McGiff. He is referring to Drs. Patrick Y-K Wong and Nasjletti. The trio has worked together since the early '70s at the Medical College of Wisconsin and later, the University of Tennessee.

Beautiful friendships

At the time, Dr. McGiff was interested in prostaglandins vis-à-vis blood flow to organs, salt and water excretion in the regulation of circulation and renal function, and their relation to hypertension, congestive heart failure and liver and kidney diseases. A good friend by the name of Gabor Kaley, then and still chair of the College Department of Physiology, let him know there was a vacancy for the chair of pharmacology.

"Sally couldn't stand Memphis and neither could I," says Dr. McGiff in recalling why he and his late wife jumped at the offer to leave the University of Tennessee Center for the Health Sciences where he was chairman of the department of pharmacology. Since four years was about as long as Dr. McGiff had remained in any medical school position—which over previous years had included Columbia University, University of Pennsylvania, St. Louis University and Tennessee—the opportunity to move back north was very attractive.

"I left most of those positions because the deans raised barriers to the pursuit of academic goals," he insists. "One of them even took my hard dollars!" That incident made him so angry he uprooted the family and went abroad for "our English period." For two years his children attended English schools while he reveled as a visiting scientist at Wellcome Laboratories at the behest of Nobel Laureate John Vane.

Nobel prize

Sir John shared the Nobel Prize for Medicine or Physiology in 1982 for demonstrating that aspirin suppresses the production of local hormones known as prostaglandins; this fundamental work eventually led to the development of the Cox-2 inhibitors Celebrex® and Vioxx®. He and Dr. McGiff still maintain a close relationship and every few years the College community is updated on Cox inhibitors in a visiting lecture from Sir John who incidentally, holds a faculty position at New York Medical College. That Dr. McGiff's name was mentioned in the Stockholm ceremony by Sir John is not surprising, considering his suffer-no-fools style in life. "My brother took over the family dry cleaning business because I had no interest in the commercial world—none! My father was the quiet one, the major influence in my life, who never interfered," he says. "I selected the college, the medical school, and he paid."



Dr. McGiff's dachshund Lucia.

Dr. McGiff finished his B.S. at Georgetown University in three years, and entered Columbia's College of Physicians and Surgeons at the age of 19. After an internship at the University of Cincinnati and residencies in medicine—first at the University of Virginia and then at Pennsylvania Hospital—he opted for a fellowship in cardiology at the University of Pennsylvania.

All work and play

There were other major influences in his life that filtered through this interview—his two-year stint from 1955-1957 as a flight surgeon with the Fleet Marine Force in Korea and Japan ("They were great drinking buddies!"); Sara (Sally) Leighton Babb, his wife of 32 years ("She taught high school English and drama and she was a pretty good horsewoman and a superb mother, too."); Samuel Rubin, dean of the School of Medicine ("He was the key figure in recruiting me, being direct and supportive, and having all the virtues of an admirable man. He made my decision easy....His word was his bond.").

Dr. McGiff has accumulated all the trappings of scientific success: voluminous publications, committee appointments and awards, memberships in societies and on editorial boards and enough honorary lectureships to keep him on the go. Is he satisfied?

Adversity is good

"There have been some bad moments—rejected manuscripts and lost grants. But we overcame. And when you do, you feel better for it. I like adversity! However, there was compensation in the form of five interesting and challenging sons and daughters..."

"I've had a great time. No one took away my toys. Science is the greatest game on earth. Worldwide I've made the most intriguing friends...Science demands your total attention and it's a great ride. You break your neck and it's worth it...The department is a great showcase for talented and dedicated scientists and staff and I'm in their debt.

"I live for the good times. As long as I can run and jump, and drink—I think Americans are preoccupied with I ounce a day, and all of the forces of darkness (Biblical prohibitions, smoking, dieting, driving 55 miles an hour). I say living well is the best revenge!"

Now he is through talking, except for his patented showstopper: "Everyone should be free to go to hell at their own speed." ■



SCREENING FOR RISK FACTORS

Where Breast Cancer Is Pervasive

The School of Public Health and Rockland County design a telephone survey to examine its high rate of breast cancer.

Two years ago, Rockland County had the dreadful distinction of having the highest rate of new breast cancers in New York State. Women on Long Island had long been told that *their* rate was unusually high, but the results of a study authorized by Congress in 1993 has found otherwise. A statistical analysis released only last August showed that Long Island rates were not much different from those in the rest of the country. What is more, the \$30 million trial failed to find any

links to pollution or other environmental factors for cause. Though the results of this study turned out to be negative, the search for causes of breast cancer are more than worthwhile. Breast cancer is the leading cause of death in women aged 34 to 55, killing more than 40,000 across the nation each year, and the numbers have increased steadily in recent years. The risk of contracting the disease at some point in a woman's life is 1 in 8, versus 1 in 22 just 50 years ago.

In the "Breast Cancer Screening Project of Rockland County" that began in February, epidemiologists are looking at the disease on a much smaller scale and from a different angle. Principal investigator is Paul Visintainer, Ph.D., program director, health quantitative sciences, in collaboration with Cathey E. Falvo, M.D., M.P.H., program director, international health and public health; and Susan Goodwin, Ph.D., assistant professor of health sciences and associate program director of environmental

ABOVE: The data is in and under analysis by epidemiologists investigating Rockland County women and their attitudes on mammography and breast cancer. Representing the School of Public Health are, from left standing, Susan Goodwin, Ph.D., M.P.A., assistant professor and associate program director, environmental sciences; Paul Visintainer, Ph.D., program director, health quantitative sciences; and at right, Sheila Smythe, executive vice president and dean. The Rockland contingent includes Kathleen Henry, B.S.N., M.A, second from right, public health administrator; and Joan Facelle, M.D., seated, commissioner of the Rockland County Health Department and M.P.H. candidate in the School of Public Health.

health sciences, in the School of Public Health at New York Medical College. The Rockland County Health Department, led by Commissioner Joan Facelle, M.D., has awarded a grant of \$70,000 to the School of Public Health to survey 2,000 of the estimated 80,000 women living in the county who are 40 and over.

The questions

"We want to know what proportion of women have ever had a mammogram, and what proportion have regular mammograms," says Dr. Visintainer. "Before attempting to identify the risk factors for breast cancer, specifically in Rockland County, we wanted to examine factors that might influence the numbers. For example, there are issues surrounding detection and surveillance. The more you look for something the more you find it. So if Rockland women have a heightened awareness and are more likely to get mammograms regularly, the better their chances of detecting it early on. And that's good..."

"This is what happened with the PSA [prostate specific antigen] test and prostate cancer. In a two-year period the incidence jumped. The PSA was detecting cancer earlier and picking up previously undiagnosed cases, which meant adjusting the baseline for newly

detected cases... As epidemiologists, we try to identify the causes of elevation in the occurrence of a disease. Sometimes these are risk factors, sometimes they are changes in technical or population characteristics such as behaviors or demographics, and sometimes both."

Sampling technique

The survey produced 1,600 responses from Rockland women by the time sampling stopped at the end of September. The 10-15 minute telephone survey was composed of 70 questions (down from an original 150), and the results were broken down by age, demographic characteristics, gender and ethnicity, among other factors.

"The questions dealt with their knowledge, attitudes, beliefs and behavior regarding breast cancer and screening," explains Dr. Visintainer. "The response rate was good—more than 70 percent." The survey questions were adapted from an NIH study on breast cancer, from the project team, and from Dr. Facelle, who coincidentally is an M.P.H. candidate in the School of Public Health.

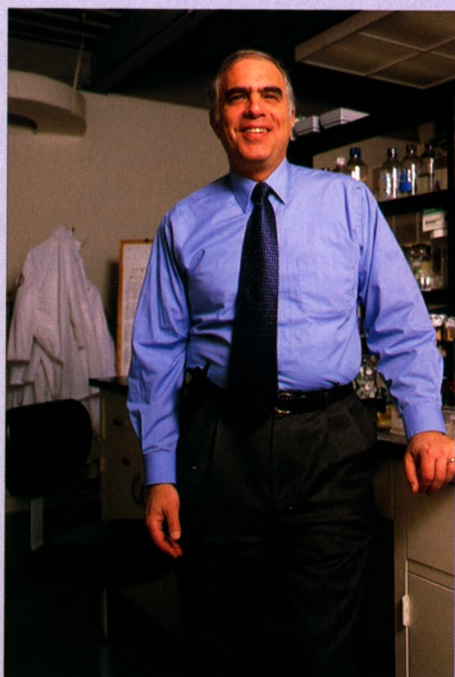
A preliminary analysis of the data began at the end of September, Dr. Visintainer reveals. Dr. Goodwin has been analyzing the results, while Dr. Qiuhu Shi, associate professor of health sciences and

senior biostatistician, helps Dr. Visintainer develop statistical models to determine what proportion of the incidence of breast cancer in Rockland County can be accounted for by the population's screening behaviors.

Epidemiology at work

"One of the first things we will do is to compare the demographics of survey respondents with census data on Rockland to see how well they agree, giving us confidence that our survey is representative of Rockland County women over 40. Our initial look shows they agree quite well. This will also help us to identify sub-groups in the population," says Dr. Visintainer. "The next step will be to look at the overall rates in mammography screening by demographics [age, ethnic groups], and then determine how attitudes and beliefs make a person compliant for screening..."

"Our intention is to use this as a framework for developing new research initiatives such as multi-county comparisons, providing estimates of how the screening rate affects the reported incidence of breast cancer in the county, and all in all, helping women to more realistically view their risk of breast cancer in Rockland County." ■



Ira S. Schwartz, Ph.D., Appointed Chairman of the Department of Microbiology and Immunology

If the name Ira S. Schwartz, Ph.D., the new chairman of the Department of Microbiology and Immunology, sounds familiar, it should. He spent 22 years in the Department of Biochemistry and Molecular Biology, three as acting chairman. A full professor since 1989, he succeeds Felix Wassermann, Ph.D., professor, who had been acting chairman since 1999. Dr. Schwartz will maintain a secondary appointment in medicine and a tertiary appointment in biochemistry and molecular biology.

He is internationally known in the field of molecular pathogenesis of infectious diseases for his pioneering studies in the tick-borne infections of Lyme disease and ehrlichiosis. Dr. Schwartz is principal investigator of studies funded at nearly \$2 million by the National Institutes of Health and the Centers for Disease Control and Prevention.

A graduate of the City College of New York, Dr. Schwartz earned a Ph.D. from the City University of New York and completed a two-year postdoctoral fellowship at the Roche Institute of Molecular Biology in Nutley, N.J.



9/11: THEN AND NOW

Nothing like it had ever happened in America. The symbol of prosperity was burning, some 3,000 of its occupants doomed to die. And then, one after the other, the towers of the World Trade Center fell down—right in front of our eyes. Not a single person in the United States old enough to understand the implications of the attack was left untouched. And as they reflect upon then and now, these New York Medical College students who had extraordinary experiences are no different in taking it personally.

Laura Fasulo, Class of '05, had moved from San Diego just two months before with her new husband, Rusty, a detail man with Glaxo Smith Kline. A former clinical research coordinator for Affiliated Research Institute, she had waited five years after college to be really sure she wanted to go to medical school. And here she was, standing outside on such a beautiful morning in September because the Basic Sciences Building had emptied from a false alarm. “Wouldn’t it be wonderful if classes were cancelled for the rest of the day?” she remembers asking no one in particular. Less than two hours later they were, when the president, provost and dean interrupted their lecture to inform them about what had happened. “We all went to the lobby and the TV was on,” she whispers. “Within minutes the first tower collapsed and I instantly started to cry, and I didn’t even know anybody who worked in the building. When I finally got home Rusty was there. He had been told to stay home. I sat in front of the TV for the rest of the day and for two weeks after that. This was the first time I will always remember where I was when it happened. I didn’t get to New York City until February and by that time there was nothing to see, but it bothered me that street vendors were capitalizing on peoples’ miseries. Still, I loved seeing the flags on cars and people were so nice to each other—and that’s a lot to say for New Yorkers.”



Laura Fasulo



Natasha Bamji

Natasha Bamji, Class of '06, was doing leukemia research at the NIH in Bethesda. The proud recipient of an Intramural Research Training Award, she was planning on graduate school and had been working only two months at the Warren Grant Magnuson Clinical Research Center—about a half-hour with traffic away from the Pentagon. Someone watching TV began running around, spreading news of the disaster there, and within minutes everyone was watching at the nearest screen just in time to see the second tower fall. “Everyone had relatives in Washington,” she recalls, “at the White House and the Capitol Building. What would be next? There was even a rumor of a car bomb outside Congress. Then the loud speaker came on telling everyone to evacuate the building. With 51 buildings on the NIH campus, we could be the next target.” It was chaos in the parking lots, with 18,000 cars on campus all trying to leave at once. She left her car and walked to the house of a friend. “I never felt danger myself. It seemed such an impossible thing,” she says. “In thinking back I was in danger, but it seemed so surreal then. Now the country has moved on and that’s what we have to do. We have to focus on the positive and not let the terrorists get the better of us.”



Richard A. Oeckler, Ph.D.

Richard A. Oeckler, M.S. '97, Ph.D. '02, Class of '04, a volunteer lieutenant in the Tarrytown Fire Department, lives next door to his firehouse. He saw the second plane hit on TV and within five minutes received a disaster page. While his buddies headed for Manhattan, he was left in charge of an area that extended from Dobbs Ferry to Ossining. The next day he got only as close as two blocks from Ground Zero, but he still recalls the "stories of rubble" he saw before being reassigned to cover Ladder 37 in the Bronx for the next week. "At first I was very angry," he admits. "I'm a downtown kind of guy and it was very personal. I was born in New York City, the center of the universe, and they had hit a part of me." Despite having to prepare his thesis defense, he "found it took a long time, two months at least, before my first thoughts were not on the World Trade Center. I channeled a lot of myself into my thesis [on cardiovascular physiology], and eventually the anguish was replaced by a numb sensation...I think the best memorial would be to rebuild the towers exactly as they were. It doesn't look like New York anymore...It's changed everything for me, and like it or not, it has forced me to be more aware of other cultures and beliefs. How can you contend with people who want to die for their religion?"

Travis J. Kemp, Class of '04, better known as T.J., is from Boise, Idaho. He had visited the towers with his girlfriend merely five months before 9/11, when they took a tour that included the top of the World Trade Center. "I'm glad we had the experience," he says, looking far away. "I was getting ready to go to class when my roommate knocked on my door. I thought it was an accident from a private plane. I watched the events unfold with my roommate in his room and we saw the second explosion. At that point, without even speaking to each other, we both knew it was no accident. We sat in shocked silence. We went to class but there weren't many people in Blue Auditorium. Then Dr. Zachrau came and cancelled class, and I went to the TV and watched some more. I felt pretty disoriented, not knowing what to do. People began to cry when the first tower collapsed and then the second one came down. I was in a bit of a hysterical mood. A bunch of us went to Westchester Medical Center to give blood, but there were so many people we never got to give it. Even at Sam's Club there were too many for them to handle in the blood drive. In thinking about it now, I remember the pictures my girlfriend and I took at the towers. Her next trip in we had a bittersweet visit to Ground Zero—just to remember the place where we had had such a good time, and yet had such a terrible thing happen."



Travis J. Kemp



Athena Lee, M.P.H.

Athena Lee, M.P.H. candidate in Emergency Medical Services (EMS), School of Public Health, is a paramedic certified in advanced life support. Having worked an overnight shift, she was taking a nap in the crew's quarters when her supervisor burst in with the news. It was no joke. In minutes the crew was in an ambulance headed over the Brooklyn Bridge and the sky was black, "like all of lower Manhattan was on fire," she shudders. "The bridge was jam-packed with people exiting the city, like in a movie. They're going out and we're going in. I suddenly realized we might not come out alive." Soon they were assigned to the staging area, but "there were no critical patients. I've never seen anything worse. If those people hadn't or couldn't get out and walk away, they died. We weren't allowed near Ground Zero because it was too hot—in every sense of the word. We actually worked over 24 hours before they made us leave, but at the debriefing nobody could talk about what happened. Most of us just felt numb. We're trained to work in an automatic mode, but there was such a feeling of helplessness. It may be buried now, but it's still there and obviously, the anger is still there, too," she confides. "I still have a feeling of rage. We were powerless and had a sense of no control. We've dedicated our lives to doing something for people and here we couldn't do a thing."

and orexin are the same peptide. Using both names together acknowledges the simultaneous discovery by two groups.)

Christopher Leonard was fascinated by cholinergic neurons well before he joined the College in July 1997 from New York University, where he earned masters and doctoral degrees in physiology and biophysics. (Perhaps his undergraduate degree in psychology from Northeastern University in Boston is responsible for the warm and patient persona he displays.) He is supported by two NIH grants totaling \$2.2 million, and has been assisted by numerous graduate students and post-docs including Kristi Kohlmeier, Ph.D., a research associate who recently completed her NIH-funded post-doctoral fellowship in Leonard's laboratory. Dr. Leonard's name appears regularly at scientific conferences attended by sleep researchers from around the world who have no qualms about praising his work.

Colleague praise

One of these is Dr. Jerry Siegel, a professor of psychiatry at UCLA and chief of neurobiology research at the Sepulveda VA Medical Center. Dr. Siegel is distinguished for having shown that a loss of hypocretin (orexin) neurons is also the

cause of human narcolepsy, and he has this to say about Dr. Leonard's research:

"It's superb work. Dr. Leonard has very cleverly combined molecular and 'in vitro' techniques to achieve a major breakthrough in our understanding of this newly discovered peptide. His finding that hypocretin controls certain other neurotransmitters, especially one called glutamate, shows that it may coordinate arousal functions throughout the brain. Our own recent work has strongly supported Dr. Leonard's pioneering conclusions. These breakthroughs in our understanding of hypocretin (orexin) may have important applications for treatment of narcolepsy and also for a broad spectrum of sleep and arousal disorders."

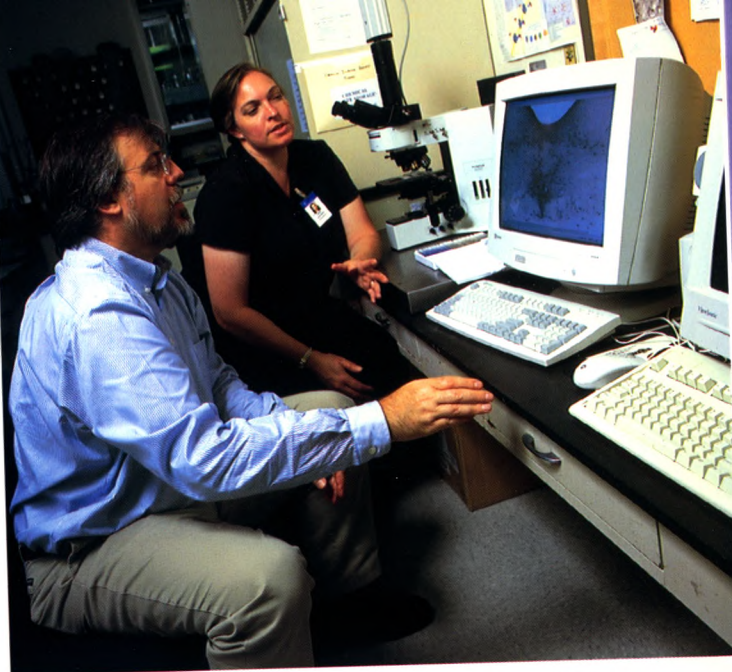
"Hypocretin/orexin excites the cholinergic neurons," declares Dr. Leonard, "an unexpected finding because all the evidence suggested this peptide should keep these neurons in check. We demonstrated that hypocretin/orexin excites these neurons through multiple mechanisms, including the release of glutamate which powerfully excites its target neurons. Others had shown the peptide might have such effects. We demonstrated its specific actions on the neurons believed to be key to the sleep/wake process."

Orexin revealed

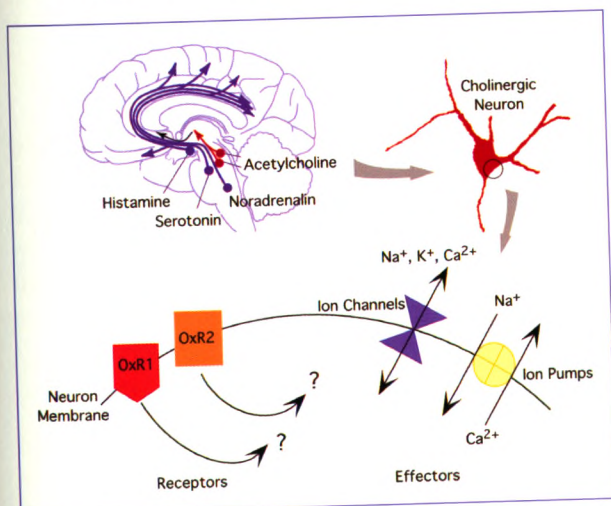
Now that some key actions of orexin have been revealed, Dr. Leonard is pondering the mechanisms and consequences of these actions. In one study with Dr. Kohlmeier, they are investigating why

the orexin system stimulates an increase in intracellular calcium, an element critical to controlling signaling molecules, gene expression and excitability. He will also continue to follow a lead he developed with his associates, Chris Tyler, Ph.D., and Sophie Burlet, Ph.D., that orexin's major action to incite neurons is achieved by opening an ion channel that is permeable to sodium, potassium and possibly, calcium. This complicated process may account for the excitability action on neurons.

"Understanding these details is only the beginning. These animals should allow us to test long standing hypotheses about the role of modulatory neurons in sleep and waking," says Dr. Leonard. "Indeed, they may help us understand the molecular consequences of sleep since we can look for differences in gene expression in the key neural circuits controlling sleep in normal and narcoleptic animals. Moreover, if orexin is keeping us awake, an antagonist might be useful in promoting sleep, and insomnia is a major clinical complaint related to sleep. In fact, major pharmaceutical companies are already pursuing this idea." ■



ABOVE: After Kristi Kohlmeier, Ph.D., completed a post-doc in the laboratory of Christopher S. Leonard, Ph.D., she opted to stay on with her mentor. Here they are engrossed in studying a mouse brain section stained for the neurotransmitter serotonin. The special mouse was engineered at the University of Texas Southwestern Medical Center to be lacking receptors for orexin, a peptide recently found to be missing in people with narcolepsy.



NARCOLEPSY 101: Neurons releasing histamine, serotonin, noradrenalin and acetylcholine (blue and red pathways, top left) normally control wakefulness. These neurons (top right) are stimulated by the neuropeptide orexin through activation of two receptors (bottom left). These receptors stimulate membrane ion channels and pumps (bottom right), although the underlying mechanisms are not understood. Since narcolepsy results from loss of orexin or its receptors, understanding these mechanisms may help in developing new drug therapies.

Pharmacology Alum FINDS “a real job”

Karen Davis-Bruno, Ph.D. '91, praises integration of physiology and pharmacology as best preparation for her top position.

Big Brother can come in many forms: the FBI, the IRS, the CDC and the CIA. If you're a basic medical scientist like Karen L. Davis-Bruno, Ph.D., '91, add the FDA. Like the carvings on Mount Rushmore, the Food and Drug Administration looms over the Rockville, Md., landscape, an omniscient force to be reckoned with by every person and firm that seeks to market a drug, biologic or medical device in the U.S. Even foods and herbal concoctions or dietary supplements that state medical claims must still pass FDA inspection as free from toxic substances. The red tape can be daunting, but for those who want to learn drug development, there is an

alternative: jump sides and join up. That's what Dr. Davis-Bruno did four years ago, and today she is the Supervisory Pharmacologist, FDA/CDER/OND, division of Metabolic and Endocrine Drug Products for the abbreviation-happy FDA.

The CDER stands for the Center for Drug Evaluation Research, where 8,000 people work in one of the agency's nine divisions; the OND refers to Office of New Drugs. What that lengthy title means is in effect, Dr. Davis-Bruno supervises the pharmacologists who are responsible for evaluating the safety of a new drug. The review group comprises a pharmacologist, clinician, project manager, chemist and clinical

pharmacologist. The primary reviewer evaluates the raw data, and based on integrating scientific findings with the health risk and the law, the group makes a recommendation to approve or deny. "It is a team decision," she says, and the role she plays "is a real job that truly has impact on drug development."

Drug development

If figuring out what she really wanted to do and then doing it constitutes "a real job," as opposed to the research she was doing before she got the FDA job, it sounds like fodder for the Freudian line. Remembering her undergraduate days at Fordham University in the Bronx, where she

earned a B.S. degree in biology, she says, "I took a pretty basic course in introductory psychology during my junior year and it briefly mentioned pharmacology and how drugs work. By the time I left Fordham I had become very interested in learning about drug development."

In 1983 she went to work as a clinical immunology laboratory technologist at Memorial Sloan-Kettering Cancer Center in Manhattan. While she was processing tissue cultures of T lymphocytes and analyzing patient data, she obtained a New York City technologist trainee license. Other brief periods of research followed at NYU and NYMC, where she was a research associate in the Department of Medicine supervised by Nader G. Abraham, Ph.D., now a professor of pharmacology. That was all the catalyst she needed to make up her mind to go for a Ph.D. degree. Five years later, under the tutelage of Michal L. Schwartzman Ph.D., professor of pharmacology, she finished her thesis on the "Regulation of corneal cytochrome P450 arachidonate metabolites: endogenous mediators of corneal inflammation." Finally, she did a post-doc at the Medical University of South Carolina in Charleston with Perry V. Halushka, M.D., Ph.D., investigating the structural/molecular basis for platelet and vascular thromboxane receptor heterogeneity.

Private industry

"I'm a generalist at heart," continues Dr. Davis-Bruno. "This makes it difficult to work for a major pharmaceutical company where they place you in a niche. So I went to work for a small biotech, Progenics Pharmaceuticals in Tarrytown, N.Y., as a staff scientist developing therapeutic and diagnostic agents. Eventually they changed research direc-



ABOVE: If you can't fight 'em, join 'em, insists Karen Davis-Bruno, Ph.D. '91, who praises her top job with the FDA as a direct result of the strong faculty emphasis in integrating pharmacology and physiology at New York Medical College.

tions, so I left [in May 1996]." Her next job with the Jerome H. Holland Laboratory for Biomedical Sciences of the American Red Cross led her to Rockville, Md. Not only did the position of scientist give her genuine experience in research and development of a drug—a product to control bleeding—but also put her in striking distance of the FDA.

"I thought the products being developed would never see the light of day," admits Dr. Davis-Bruno. "So when I heard the FDA was looking for people I applied. What better way to learn about drug development than to be a reviewer! They interview you for a specific division based on your qualifications, and I was placed in the division of Reproductive and Urologic Products." She moved to the metabolic and endocrine division in August 2000, a very busy place to be in the era of fen-phen, Fosamax, Meridia and Baycol, one of the newer statins. There are dozens of thyroid medications like

Synthroid, which recently received approval although it had been used for decades. Physicians were prescribing it despite its never having been submitted for FDA approval.

Clear conscience

"We realize a drug will have a major impact and we are concerned about safety for the American public. I'm in the right place for sure—for a generalist like myself," she repeats. "I know the basics I learned at New York Med are something I use everyday, and because of what my interests are, I know I received a better foundation than if I had gone to medical school..."

"I would be remiss if I didn't mention that the strong faculty emphasis in integrating pharmacology and physiology at the College was and continues to be essential to what I do on a daily basis.

Although the current emphasis in the scientific community is at the molecular level—proteomic, genomics, metabolomics—we can't lose sight of what is going on in the whole organism. This seems to reflect a paradigm shift in medical education that is troublesome to the government public health sector and the pharmaceutical industry in particular... While it's understood that research funding is generally geared to the molecular level and approach, it is imperative that the integrative effects of whole organism fundamental biology continue to be taught as the backbone of graduate education. Otherwise, as the graying of the baby-boomer workforce reaches retirement, these skills may be lost.

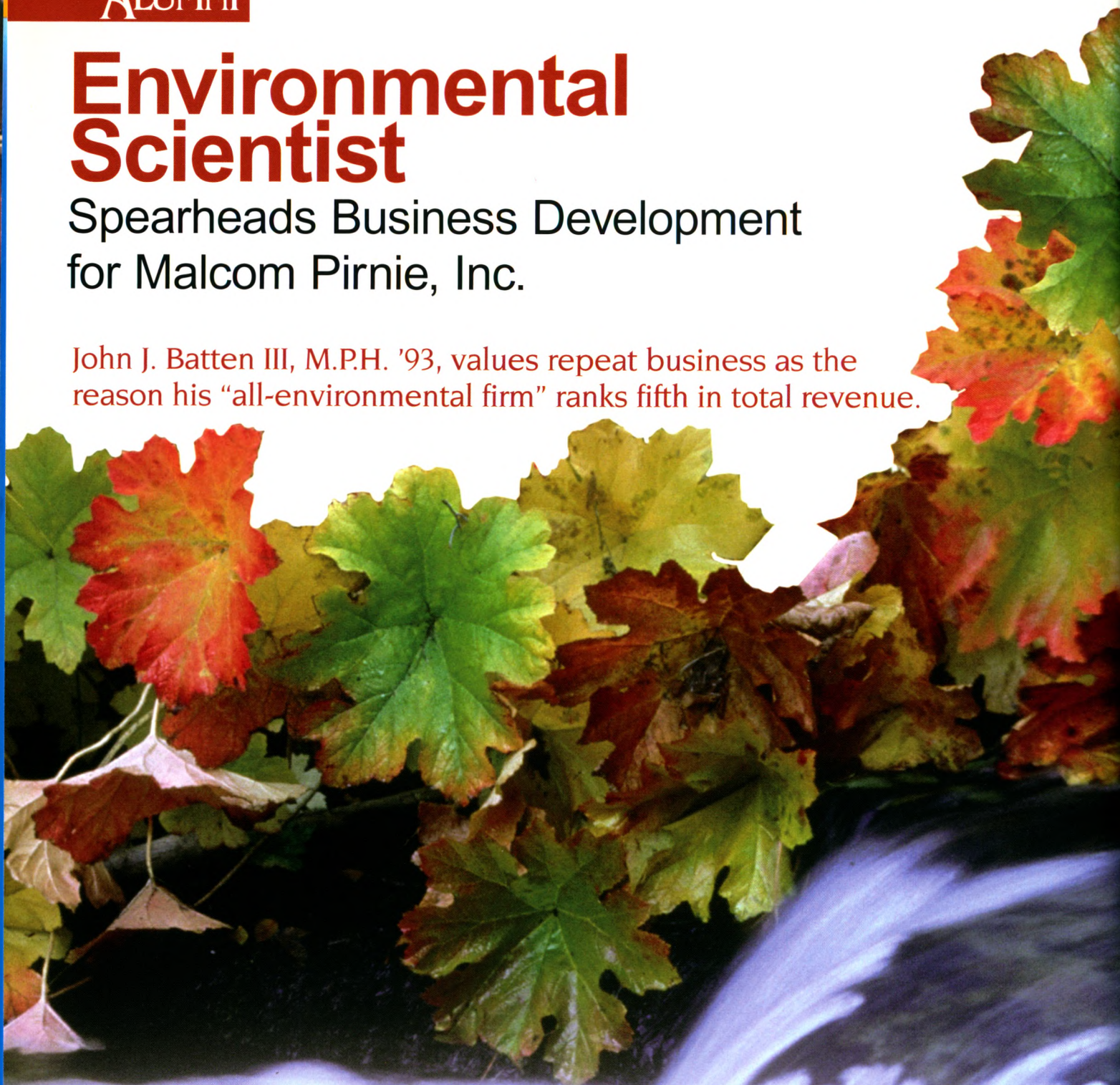
"Dr. McGiff and his [Pharmacology] faculty are dedicated and highly skilled in this particular training. I am indebted to all of them for the patience, persistence and skills they contributed to my education." ■

ALUMNI

Environmental Scientist

Spearheads Business Development for Malcom Pirnie, Inc.

John J. Batten III, M.P.H. '93, values repeat business as the reason his "all-environmental firm" ranks fifth in total revenue.



John J. Batten III, M.P.H. '93, is a licensed wastewater treatment plant operator, but it's been oh, so long since he's done that. Still, it is how he got his foot in the door 22 years ago at Malcolm Pirnie, Inc., White Plains, N.Y., ranked as the fifth leading "all-environmental firm" by *Engineering News Record* with revenues of \$216 million in 2001. Vice president and director

of marketing since 1994, Batten heads the company's business development program of \$300 million in annual sales to industrial, federal and municipal clients. What he likes best is the firm's commitment to improving the environment and protecting public health. "We are stewards of the environment, preserving the quality of life and sustaining the environment."

Environmental commitment

Because Pirnie provides engineering services for water and wastewater treatment, solid and hazardous waste management, air quality, information management technology, and performance enhancement consulting, Batten needs to be prepared to discuss any of a

wide-range of topics with clients. Although his background comes from protecting and improving the public water supply, his job entails being conversant with clients on such disparate topics as microbiology and environmental policies and assessments, impact evaluation, ecosystems and regulatory agencies.

About 65 percent of Pirnie's business revolves around helping municipal agencies (city, state, county) address environmental issues. For decades, Pirnie has been integral in helping its largest municipal client, the New York City Department of Environmental Protection, to establish and maintain its water and wastewater programs. Pirnie also assists industrial clients in achieving their environmental goals, and has worked with such businesses as American Airlines, AIG Insurance and Con Edison, which account for 20 percent of the firm's revenue, while the remaining 15 percent comes from federal sources—the Army Corps of Engineers, Navy, Air Force and the U.S. Environmental Protection Agency.

Clients forever

"No assignment is too small for a long-standing client," Batten declares, waving in the direction of his staff of 30 who operate with an annual departmental budget of \$12.5 million. They are among Pirnie's more than 1,300 employees working in more than 40 offices throughout North America. "Our marketing people are all technical professionals. They know the business and they're licensed in their areas of expertise," he says.

It turns out that one of their consistent clients is New York Medical College, which "spent \$280,000 on improving health and safety, industrial hygiene, and RCRA [Resource, Conservation and Recovery Act] compliance in the last five years," he says after accessing the records. However in 1990, Batten found himself the client when he embarked on an M.P.H. degree in environmental science from the Graduate School of Health Sciences, recently renamed the School of Public Health. "I completed the 45 credits in three years," he says, "two courses each term and one in the summer.

"I had been curious about related subjects like toxicology, epidemiology, indoor air quality, and the program helped me keep current with emerging issues. The scheduling of classes accommodated my work life and my pretty insane travel schedule. Besides, I really enjoyed my fellow students—studying with doctors, nurses and pharmaceutical reps.

"New York Medical College gave me a quality education and I'm proud of my degree."

Teaches, too

Every couple of years in the summer, Batten slips on a scholarly cover and becomes an adjunct professor of public health, teaching PH970.26.3 or "Public Health and Water Quality." "I love being a guest lecturer," he admits. "It speaks to my commitment to the school and the student body." Being the son of teachers, it probably comes naturally: "My mother taught all grades in school, and my father was a research adviser at Brooklyn Polytechnic." In addition to the M.P.H., Batten has an AAS in applied science in wastewater treatment from Northern Virginia Community College, and a B.S. in environmental sciences from The American University in Washington, D.C.

Wonder man

Batten's dictum to develop a portfolio of repeat clients, which make up 80 percent of the roster, is of his own making. "We ingratiate ourselves into their lives and we respond to their requests," he emphasizes. "We have been described as client-centric and client-focused and we are. We want clients that are looking for a long-term relationship built on trust ...I'm approaching 2 million air miles this year," he offers as proof posi-

tive that he devotes 60 percent of his work time "touching" his internal and external clientele.

Although he travels a lot of the time, meeting regularly with clients and client managers across the country, Batten has a firm command of Pirnie's corporate marketing program.



ABOVE: Sophisticated traveler John J. Batten III, M.P.H. '93 promotes the environmental services of Malcolm Pirnie, Inc., as "stewards of the environment, preserving the quality of life."

It makes him responsible for enhancing the firm's image and furthering the corporate brand through promotional activities that include direction of Malcolm Pirnie's worldwide website (www.pirnie.com).

Married and the father of a young son and daughter, Batten is a passionate New Yorker and New York Yankee fan. A resident of Manhattan, he is a devotee of the American arts and crafts movement, which he explains is art, pottery and furniture created between 1900 and 1915. "I play squash and I like to fly fish in Patagonia (southern Argentina and Chile)," he continues. But lest anyone think otherwise, Batten is Malcolm Pirnie's engine and conscience: "I absolutely love working here. I wake up excited to come to work because we really do important things." ■



Is Cancer Prevention Another Reason For Working Out?

Anne McTiernan, M.D. '89, Ph.D., M.A., B.A., studies exercise as a deterrent to breast and colon cancer at the Fred Hutchinson Cancer Research Center.

The list is pretty long for things that used to be good for you and now are not (estrogen) and vice versa (olive oil). Then there are other things (caffeine) that swing both ways, depending on the latest research. For a 100 percent endorsement that never wavers, this advice from the Fred Hutchinson Cancer Research Center is worth considering: "Up to 70 percent of all cancers could be avoided by simple lifestyle factors such as not smoking, eating a healthy diet, wearing sunscreen and exercising regularly." It's that last item, *exercising regularly*, that capti-

vates an alumna of the New York Medical College School of Medicine, Anne McTiernan, M.D. '89, Ph.D., M.A., B.A., and the Public Health Sciences Division of Fred Hutchinson, which became famous for pioneering the bone marrow transplant. Dr. McTiernan is director of the division's Prevention Center, which includes a research clinic, an exercise testing and training center, and a feeding studies center. These help to support a multi-disciplinary program to reduce the incidence and impact of cancer. Her role, directing a staff of 30, revolves

around changing behaviors to reduce breast cancer and colon cancer, her interests in particular. That's where the exercise comes in and she has the results to show for it.

Breast fitness

Having published widely in major medical journals, Dr. McTiernan branched out two years ago to produce *Breast Fitness: An Optimal Exercise and Health Plan for Reducing Your Risk of Breast Cancer*, for which she was editor and first author. "My research focuses on identifying ways to prevent new or recurrent breast cancer and colorectal cancer with a particular focus on physical activity and exercise," she explains. This should not imply she is biased toward complementary techniques, however. In addition to being a "member" (a euphemism for full professor) in the prevention program, Dr. McTiernan is a research associate professor in the department of epidemiology, University of Washington School of Public Health, where she earned her doctoral degree. Her ties to the prestigious cancer center in Seattle began with a primary care/internal medicine residency at the university. That was preceded by a master's in medical sociology from SUNY Buffalo and a B.A. in sociology from Boston University.

"Breast cancer is the most common invasive cancer in women," she informs. "Everyone knows someone who has it—two-thirds are older women and 15 percent are family members of other patients. Fewer people get colon cancer, but more die from it. With colon cancer you can find early disease, a polyp, which is a precursor. All you have to do is get it out. There are no similar precursors with breast cancer, and even if a lesion is negative, you have to go through all the tests and biopsy anyway."

Principal investigator

Dr. McTiernan is principal investigator of several clinical trial and cohort studies that investigate the associations among exercise, diet, body weight, hormones and risk for cancer incidence and prognosis. Coincidentally she has

worked closely with William H. Frishman, M.D., the Barbara and William Rosenthal Professor and Chair of Medicine at the College, who is co-investigator for the Women's Health Initiative (WHI) study. Not only is Dr. McTiernan a co-investigator, but she also directs the clinical outcomes efforts at the WHI Clinical Coordinating Center at Hutchinson, one of 40 centers participating in the

fractures in the subjects. A review of preliminary data not only showed no heart benefit, but also evinced a 29 percent increase in heart attacks and a 22 percent increase in total cardiovascular disease among women receiving hormones. Equally disturbing was a 26 percent increase in breast cancer in women taking the hormones compared with those on a placebo. The firestorm that erupted in the general population—



ABOVE: Anne McTiernan, M.D. '89, Ph.D., M.A., B.A., does only research at the Fred Hutchinson Cancer Research Center, where she directs the Public Health Sciences Division Prevention Center. Her secret ingredient is exercise.

trial nationwide that involves an astounding number of women—more than 165,000. Dr. McTiernan says she was not surprised when, picking up a newspaper while in Europe, she read that the NIH had recommended that subjects who were taking Prempro (estrogen and progestin) or Premarin (estrogen alone) stop doing so and ended the study—one of four comprising the entire WHI clinical trial.

Risks outweigh benefit

This hormone replacement therapy study, scheduled to run until 2005, involved more than 26,000 women, ages 50 to 70, and was designed to determine whether estrogen plus progestin could prevent heart disease and hip

between gynecologists who disagreed with the abrupt cessation, and women who panicked at having to go off their hormones—has not waned.

"Our safety board met every six months and the regulations spelled out when the criteria for stopping was met. We saw an increased risk of heart attack and stroke early on," says Dr. McTiernan, "and we notified our subjects but did not stop the trial. We thought the indications might be temporary—but they were not." At any rate, the women who were not taking one type of hormones (estrogen plus progestin) are still being followed until the end date. They include those taking estrogen alone, a number on low fat diets, others getting calcium and vitamin D, and still others just being observed.

Impact of research

Dr. McTiernan, who says she spends all of her time in research, is involved in several other trials. "Physical Activity for Total Heart (PATH)" is in its fifth year, funded by the National Cancer Institute for \$3.5 million. Half of the 173 postmenopausal subjects were randomly assigned to a group that exercised 45 minutes a day, 5 times a week, primarily with the treadmill and bicycle. "We found that exercise lowered the levels of blood estrogens by as much as 20 percent," she says. The study also measured cardiopulmonary fitness by having treadmill users breathe into a device that separates and measures the gasses exhaled. Exercise increased their

Breast Fitness



An Optimal Exercise and Health Plan for Reducing Your Risk of Breast Cancer

**Anne McTiernan, M.D., Ph.D.,
Julie Gralow, M.D. & Lisa Talbott**

V02MAX, which measures the heart's ability to pump blood and the lungs' ability to retrieve oxygen from the blood, by 13 percent; controls showed no change. "We're also doing other clinical studies and cohort studies that measure things like diet, weight, physical activity, blood hormones and the risk of occurrence and survival," says Dr. McTiernan. "And we are storing blood that can be used in research for any disease." Though menopause is not an ailment, it certainly leaves a large percentage of women with very uncomfortable symptoms. The doctor's research team might consider looking into something to take the place of the estrogen/progestin solution that turned out to be no panacea. ☒

FOUNDER'S DINNER IS PRESCRIPTION FOR A GOOD TIME



ABOVE: This merry lineup from the New York Medical College Founder's Dinner, held at the Rye Town Hilton in October, featured, from left, Rev. Msgr. Harry C. Barrett, D.Min., M.P.H., president and chief executive officer; Alvin I. Goodman, M.D., professor of medicine and recipient of the Distinguished Service Award; Barbara Z. Monohan, board chair, and Theodore N. Keltz, M.D., president, American Heart Association, Westchester Region, recipient of the Jackson E. Spears Community Service Award; Ralph A. O'Connell, M.D., provost and dean of the School of Medicine; and Gerald Cunningham, member of the Board of Trustees who received the William Cullen Bryant Award.



ABOVE: Msgr. Barrett, left, was touched by the surprise citation he received from Dean O'Connell to commemorate his first decade of inspired leadership. ☒

GERARD P. CURRAN, M.D. '95 AND PHILIP HIRSHMAN, M.D. '94

Working in the Middle East, as Doctors and Soldiers

Gerard P. Curran, M.D. '95, and Philip Hirshman, M.D. '94, shared a dream: to become doctors and soldiers, to care for people and to serve their country. Although they've never met, they followed their dream down a similar path—from the military to medical school to active duty, including tours in the Middle East, where they supported the U.S. in its efforts against Afghanistan. Recently discharged, both have returned to family, with a new appreciation for home.

They were soldiers first. Dr. Curran, 38, an emergency medicine physician who graduated from West Point Military Academy in 1986, said medical school was always in the back of his mind. At the beginning of the Gulf War, while awaiting deployment to

Kuwait, he applied. "I was up all night doing guard duty, and I filled out an application to New York Medical College," says Dr. Curran, formerly a major in the U.S. Army. When he returned six months later in April 1991, he had invitations to interview at four medical schools. New York Medical College was the lucky winner.

Dr. Hirshman, an obstetrician/gynecologist and also a former Army major, joined the ROTC in college and spent those four years of reserve duty—half of his eight-year obligation to the Army—attending NYMC. After his residency, he was assigned to Fort Hood, Texas, which he calls "the busiest obstetrical service in the Department of Defense." Coining himself a "combat gynecologist," he treated the wives and children of 42,000 active duty troops, plus retirees. "That's a lot of people," Dr. Hirshman says.

Dr. Curran also treated a large patient population, as an attending emergency room physician at Fort Bragg, S.C. Home of the 82nd Airborne Division, Fort Bragg has an emergency department that handles 70,000-75,000 patients a year, many with intercranial bleeds and broken backs or pelvises from jumping out of



Dr. Gerard Curran gives tender care to one of his younger patients.



Dr. Philip Hirshman stops for a picture while in flight aboard a C-130 military transport plane over Afghanistan, en route to a U.S. military hospital in Uzbekistan.

continued on page 38

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SHEILA CONKLIN, M.P.H. Making Health Care Connect

Among the many complaints about health care today, lack of continuity ranks high.

Managed care, in its efforts to contain costs, has made patients, even those with multiple medical needs, their own case managers. They must choose their own specialists from a list of referred providers and schedule their own appointments.

Frequently they must spend time and money traveling to distant medical offices. While this may save health plans money, it exacts a price from patients in increased stress, lost income and time that could be devoted to their care. Sheila Conklin, M.P.H. '00, would like to change that.

"It's overwhelming to deal with diagnoses," says Conklin, who earned her degree in health policy and management at New York Medical College. "A patient with cancer doesn't want to wait for an appointment or an answer. It's nerve wracking."

Conklin, who works for the Office of Clinical Practice Evaluation at New York-Presbyterian Hospital in Manhattan, is interested in changing the way health care is delivered. And she plays a significant role in improving the delivery of care at the medical center. As manager of clinical information support, Conklin gathers data to show administrators how effectively the hospital is integrating patient care through "service lines," its system for linking all providers, treatments and services related to a particular disease. For example, the oncology service line makes

sure surgeons, oncologists, radiologists and even physical therapists are communicating and working together to coordinate a patient's care. "It's continuous care we're looking for within the disease process," Conklin says.

ing interest in healthcare finance and management propelled her to earn a master's degree in business administration. She worked in banking for a while and then became a financial analyst in the international division of Bristol-Myers



Sheila Conklin, M.P.H. '00

Integrating patient care is important from a patient, as well as a business, perspective, says Conklin, who has an MBA in healthcare finance. "Integrated care is something you can market," she says. "Patients don't want to go searching for doctors or second opinions. They'd rather have a place that handles all aspects of care under one umbrella. It's like having a general contractor for your house."

Health care—the clinical and the business side—has always attracted Conklin. While weighing a career in medicine as an undergraduate at Boston University, she began working part-time as a medical transcriber at Boston Medical Center. Her increas-

Squibb. After staying home to raise her two children, Conklin decided to return to healthcare finance, but first wanted to earn a public health degree. "I knew it was going to take some education to get my credentials up to speed," she says.

Less than a year after graduating from NYMC, Conklin parlayed her background in medical records, physiology and biology, finance and public health into her current job. Still drawn to the clinical aspects of care, she eventually would like to manage an entire operating area, where treatments are administered and she can interact with patients. But for the time being, she says, "I know what I'm doing is making a contribution." ♦

Anatomy of a Romance

Neither Alissa Bennett, M.D. '02, nor David Hersh, M.D. '02, was looking for love, especially in their first year of medical school. But from the moment they met, they knew there would be something between them. And they knew what that something would be: a cadaver.

"The first time we met we were looking at the bulletin board to see who our anatomy lab partners were," says Alissa, now Alissa Hersh, who married David two Thanksgivings ago. They didn't see each other again until a week-and-a-half after orientation, standing around the anatomy table with two other first-year students, Ruth Alejandro and Nicole Lanatra. "We weren't really friends," Alissa says, describ-

ing her early relationship with David. In fact, the two hardly spoke to each other, which was neither here nor there, since David was casually dating other people and Alissa had a boyfriend at the time. But by the end of that first semester, things began to change.

Call it chemistry, call it coincidence, or kismet. When you're a first-year medical student, finding the person you know you want to share the rest of your life with could easily take all three. For David and Alissa, sharing the same kind of hectic and demanding schedule actually helped set the stage for the relationship. "We saw each other every day," recalls Alissa, who says she felt her first romantic inkling toward David when he brought her a Diet Coke and a Snickers bar in the library and then walked her back to her apartment at 2 a.m. "I thought, 'Wow, that was really very nice,'" she says. "He got big points for that."

From then on, the couple spent a "crazy amount of time together," studying, sharing meals and walking together to class. "We really got to know each other," she says. As nature took its course, they discovered that their fathers, Sheldon Hersh, M.D. '78, an otolaryngologist, and the late Harold Bennett, M.D. '62, an orthopaedic surgeon, had both graduated from New York Medical College.

While a year-long courtship may sound brief, if not downright rushed, in this age of prolonged engagements, sharing the rigor and stress of medical school, getting acquainted in the most difficult of times—and falling in love despite them—assured David and Alissa that they were meant for each other. "You have the opportunity to get close,"

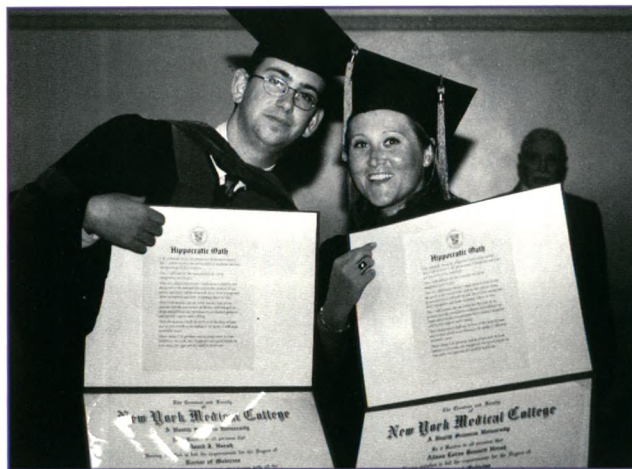


PHOTO BY ROBERT FLOYD PHOTOGRAPHY

David Hersh, M.D. '02 and Alissa Bennett Hersh, M.D. '02, once anatomy lab partners, are now husband and wife.

Alissa says. "You share a lot of stresses and bonds. You get to know that person in a stressful circumstance and see how they react in different situations."

Not that the evolving romance didn't take them by surprise. The demands of medical school alone seemed to eliminate any possibility of having a serious relationship, David says. A soft-spoken man whose few words come out in rapid fire, he says, "Dating someone [seriously] at that point was the last thing I had on my mind." When he did envision settling down, it certainly wasn't with a doctor.

"He wanted someone who had a 9 to 5 job, which would allow her to be home by 6 or 7 at night," says Alissa, who admits she wasn't looking for marriage either. "I didn't have any vision of being married," she says in a bubbly voice, a stark contrast to her husband's matter-of-factness. "I thought medicine was going to be the first thing to ground me and then marriage. It turned out to be the other way around."

David, an Orthodox Jew, explains that tradition does not condone dating indefinitely. He proposed in March of their second year of medical school. On the Sunday after Thanksgiving—November 26, 2000—they married. "We had finished our family medicine rotation on Wednesday," Alissa says. "Thursday

was Thanksgiving. Monday was the first day of our neurology rotation." On Monday they honeymooned. On Tuesday they were back in school.

Today, just past their second wedding anniversary and only six months out of medical school, the Hershes are learning to balance their lives as new doctors—and spouses. It is a challenge, especially with schedules that have them passing like ships in the night, one going to and the other returning from the hospital. While David, an internal medicine intern at Lenox Hill Hospital in Manhattan, worked from 9 p.m. to 7 a.m., six days a week during the summer, Alissa, a pediatric intern at Montefiore Medical Center in the Bronx, worked from 6:45 a.m. to 5:30 p.m., six days a week. "We saw each other for a couple of hours in the middle," David says.

Such a schedule would stress the most solid couples, but the Hershes are learning to work it out. "Just living with somebody totally changes your understanding of the other person. You adjust your expectations in order to help each other," Alissa says. "We both have our separate lives during the day and appreciate what the other is going through. The time we do have together we try and make special." ♦

Is There a Spouse in the House?

Alissa and David Hersh's meeting and marriage may sound like romantic coincidence. Consider, however, they are among *five* couples from the Class of 2002 who have married. Trend hounds could have a field day with the number of matrimonial knots tied—or being tied—in the Class of 2002. But according to Alissa Hersh, there is really no great mystery as to why med students marry each other. "We don't have time to see anybody else," she says, only half-kidding. In fact sharing the stress of medical school is actually what brings many couples together, she says. Other members of her class who married (as of October 1) are Bhriju Chopra and Reena Malhotra; Anupam (Bobby) Garg and Biraj Shah; Eun Ha Kim and David Shin; and Anne-Marie Mays and Clayton McDaniel.

The Founder's Dinner

Honoring New York Medical College and Its Supporters

New York Medical College paid tribute to its staunchest friends and supporters at the annual Founder's Dinner held in October at the Rye Town Hilton in Rye Brook, N.Y. The College paid tribute to Gerald W. Cunningham, president and chief executive officer of Glenties Leasing and a member of the College Board of Trustees; Alvin I. Goodman, M.D., professor of medicine, and the American Heart Association Westchester Region for years of friendship and service. It also specially recognized Rev. Msgr. Harry C. Barrett, D.Min., M.P.H., president and chief executive officer, for his decade of leadership.

A trustee for more than 13 years, Cunningham received

the William Cullen Bryant Award, named for the College's founder, in honor of his leadership, business expertise, loyalty and generosity. Dr. Goodman, retired director of the Division of Nephrology and current director of the Westchester Artificial Kidney Foundation, received the Distinguished Service Award for more than 30 years of service. The heart association received the Jackson E. Spears Community Service Award for the education, research and advocacy it has dedicated to fighting heart disease.

In his opening remarks, Rev. Barrett said, "The individuals whom we honor tonight exemplify the best of New York Medical College." In addition



PHOTOS BY ROBERT FLOYD PHOTOGRAPHY

Enjoying the evening were, at left, Kevin Reilly, M.D., director of obgyn at Our Lady of Mercy Medical Center in the Bronx; his wife, Marcelle Reilly, and at right, Elliott N. Perla, M.D. '74, chief of the department of medicine at Metropolitan Hospital Center, and his wife, Heather Lurie, M.D.

to applauding their achievements and contributions, the dinner also serves as the College's major fundraising gala, raising significant dollars in support of its educational and research activities.

Saverio Bentivegna, M.D. '50, senior associate dean, echoed many alumni when he said the evening filled him with pride: "I've seen the College develop into what we dreamed of 25 years ago, when we moved from New York City to Westchester. It is a first-class medical university that makes its alumni proud." Elliott Perla, M.D. '74, chief of the department of medicine at Metropolitan Hospital Center, praised the College for having more diversity, talent, research, and resources than ever. "The school has grown so much in the 30 years since I matriculated it's amazing," he said.

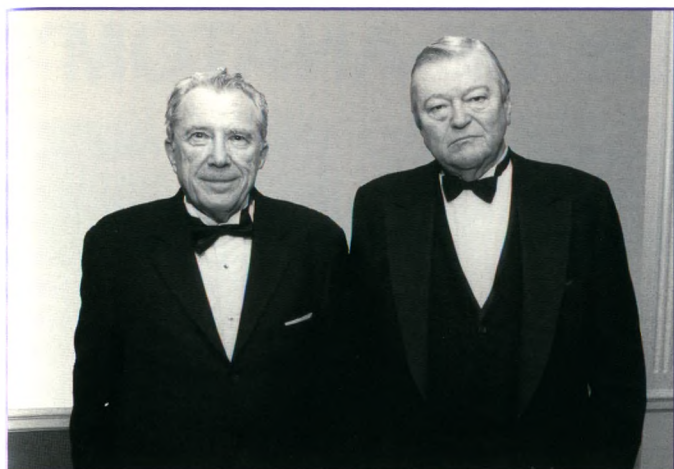
Richard Stone, M.D. '68, senior associate dean at Metropolitan Hospital Center, said the hospital—a teaching and training facility for NYMC

residents—like the College, had seen dramatic growth. "When I trained at Metropolitan as a junior medical student, it was a massive, chaotic 1200-bed hospital. It looked like the IRT station at rush hour. Now it's a 341-bed, recently renovated, state-of-the-art facility," he said.

While saluting the College, alumni also enjoyed the opportunity to catch up with colleagues and friends. Gene Cayten, M.D. '67, professor of surgery at NYMC and program director for the department of surgery at Our Lady of Mercy Medical Center in the Bronx, said, "It's nice to see the College grow and expand and to renew acquaintances." Cono Grasso, M.D. '74, who also came to see old friends, said he felt proud to be on the faculty of his former medical school. Chairman of the department of ophthalmology at Saint Vincent Catholic Medical Centers, and assistant professor of ophthalmology at the College, Dr. Grasso said he is especially pleased



Old and new friends gathered at the Founder's Dinner including, from left, Joseph F. Dursi, M.D. '59, associate professor of surgery; Joseph P. Corcoran, president of The New York Eye and Ear Infirmary; James J. Walsh, M.D. '80, chairman of the Department of Ophthalmology; Louis E. Fierro, M.D. '60, president of the Alumni Association; and William H. Frishman, M.D., Barbara and William Rosenthal Professor and Chair of Medicine.



Honored at the Founder's Dinner for dedicated service were, from left, Alvin I. Goodman, M.D., recipient of the Distinguished Service Award, and Trustee Gerald W. Cunningham, who received the William Cullen Bryant Award in honor of his leadership, business expertise, loyalty and generosity.



Toasting the College are representatives of the American Heart Association (AHA) Westchester Region, honored for years of friendship and service. From left are, Barbara Z. Monohan, board chair of the AHA Westchester Region; Theodore N. Keltz, M.D., president of the board; and Shelley Lotter, AHA executive director.

to be working with NYMC graduates who comprise 20 percent of the residents he supervises. "They're extraordinarily well-trained," he said.

That many alumni have decided to return as faculty members is a testament to the College's superior education and training, said Leonard Newman, M.D. '70, chairman of the Department of Pediatrics. Dr. Newman, who recently received his 30-year pin, beamed with joy when he mentioned that his daughter, Rebecca, is a second-year student. He knows firsthand

that she is getting a superb medical education, he said. Mary Hawkins, M.D. '75, remarked it was her education at NYMC that allowed her to enjoy learning for the first time. "Being at the medical college was the first time I wanted to learn for the sake of learning," she said.

The evening was more than a tribute to achievements in education, training and research at the College. According to Philip Marraccini, M.D. '50, a member of the Board of Trustees, "It is a tribute to what we are going to do in the future!" ♦

M I L E S T O N E S

2002

Brendan J. Bligh, M.D. '02, has begun a three-year residency in family practice at St. Joseph's Medical Center in Yonkers, N.Y.

Michelle L. Brosnan, M.D. '02, received a \$1,000 fellowship from the BPW/NY Grace LeGendre Endowment Fund on June 8, 2002. Named for a former president of Rochester Business and Professional Women's Clubs of New York State, the fund provides fellowships annually to women enrolled in graduate programs in New York State and who are state residents. Dr. Brosnan, an emergency medicine physician, will spend her first year of residency at St. Vincent's Hospital in Manhattan.

David L. Fernandes, M.D. '02, is an internal medicine resident at the University of Southern California hospitals in Los Angeles. His mother is **Elaine Digrande-Fernandes, M.D. '67**.

Heather Goff, M.D. '02, is doing her four-year residency program in psychiatry at Yale-New Haven Hospital in New Haven, Conn.

Gail Clifford, M.D. '91, is working as a full-time hospitalist at Southwest Iowa Medical Center in Council Bluffs, Iowa. (A hospitalist cares for hospitalized patients and does not maintain a private practice.)

Shevaun M. Doyle, M.D. '92, is a pediatric orthopaedic surgeon with Westchester Orthopaedic Associates, PC in White Plains, N.Y.

Daniel J. Glatt, M.D. '92, is practicing internal and addiction medicine in South San Francisco with his father, **William Glatt, '64**. He is the father of two, Taylor Rose and Evan.

Sandy S. Rich, M.D. '92, is married to Judith D'Ariano, sister of **Gerard D'Ariano, M.D. '92**, and has three wonderful children. He completed his hematology/oncology fellowship at Yale and is practicing in the Chicago area.

Joseph E. Chase, M.D. '93, graduated in July from the San Francisco Orthopaedic Residency Program at St. Mary's Medical Center, where he completed his residency in orthopaedic surgery. He is beginning a fellowship at Massachusetts General Hospital in Boston. He will be involved in the care of high school, collegiate, and professional sports teams, including the New England Revolution, the New England Patriots, and the Boston Bruins.

Carri Allen Jones, M.D. '93, has become a full partner with Orthopaedic Associates of Central New York, in Syracuse.

Michael Murray, M.D. '93, finished his residency in orthopaedics at Westchester Medical Center and will be doing a fellowship at the University of California, San Francisco.

Philip Hirshman, M.D. '94, a doctor with the U.S. Army, recently returned from deployment to Southwest Asia and the Middle East, in support of Operation Enduring Freedom. He is happy to be back home with his wife and two children. His military commitment over, he plans to go into private practice in Dallas, Texas.

Robert V. Steinberg, M.D. '94, has joined the department of medicine at Arden Hill Hospital/Horton Medical Center in Middletown, N.Y. He is also affiliated with Mid-Hudson Hematology/Oncology in Middletown.

Barbara Ruth Bellar, M.D. '95, a family practice physician, is also a captain in the U.S. Army Reserve and a lawyer. In June she received her Juris Doctor from John Marshall Law School in Chicago.

2001

Michael Schuster, M.S. '01, is working for Angioblast Systems, a company seeking a cure for heart disease using adult stem cells.

1990s

Paul Antonecchia, M.D. '90, has been appointed to the board of trustees of St. Vincent's College in Bridgeport, Conn. He is medical director of informatics in the quality management department of St. Vincent's Medical Center and chairman of the St. Vincent's physician clinical information system task force. Board-certified in internal medicine, he is also an assistant clinical professor of medicine at both Columbia University and New York Medical College.

John Ragan, M.D. '90, has joined the staff of the Dakota Clinic in Fargo, N.D. Dr. Ragan, an invasive cardiologist, will be working in the clinic's heart and vascular center.

Tamara A. Topoleski, M.D. '90, is practicing at the Orlando Orthopaedic Center in Florida, where she specializes in general orthopaedics and pediatric orthopaedic surgery. She is also affiliated with Florida Hospital and Orlando Regional Healthcare.

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Bringing Humanity To THE STUDY OF ANATOMY

The students file in, one by one. It is their first year of medical school and Day One of Gross Anatomy Lab. They are excited and tentative. Mostly they are eager to learn about the human body in a room where spaciousness, fresh air, hanging plants and natural light bring a sense of humanity to the study of anatomy. Opened last fall, the

tion Center and, in particular, to the impression that the new gross anatomy lab makes on applicants during their campus tour. After all, many students have some initial anxiety about anatomy."

James Wyss says the new lab was a big deciding factor in choosing a medical school. "Almost all the other ones I saw

The \$2 million laboratory, a gift from the Alumni Association of the School of Medicine, occupies the entire top floor of the Medical Education Center. Its high ceilings and clerestory—the skylight-like windows that span the entire length of the room—give the room airiness, flooding it with ambient, natural light. What makes the lab especially pleasing to work in is its specialized ventilation system, which infuses the room with fresh air 18 times an hour. The 2,800 square feet provide 28 percent more teaching space than the old lab, and it can accommodate up to 36 dissecting tables, allowing for the study of 75 cadavers—compared to 50 in the old lab—at a time.

Students and teachers agree that the lab enhances learning and teaching. "It was difficult coming in here," says Matthew A. Pravetz, O.F.M., Ph.D. '88, associate professor and gross anatomy course director. "When we didn't have any light coming into the room you had little idea of how time was passing." Students had no sense of class work deadlines. Their minds wandered.

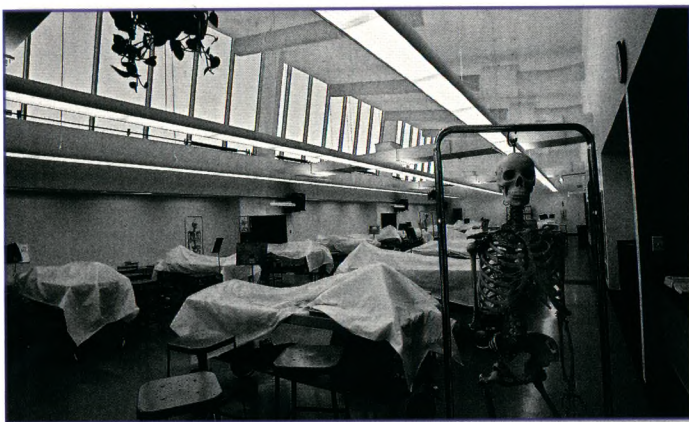
Dana Grasso, a second-year student, insists, "The old lab was depressing." Dr. Pravetz says it made even *his* energy lag. But in the new sun-filled room, concentration and focus are better. "I am more energized," he says.

Jon Perrillo, M.D. '00, a third-year general surgery resident at Westchester Medical Center who attends monthly anatomy reviews there, admits he just feels happier in the new lab: "It puts me in a better frame of mind."

Dr. Etlinger credits the lab's innovative design for totally changing the teaching atmosphere. "A single large open space encourages comradery

Annual Fund To Help Alumni Association Pay For Lab

The new Alumni Gross Anatomy Laboratory was made possible through a gift of the New York Medical College Alumni Association. The association has already raised half of the \$2 million it pledged to fund the lab, but according to Catherine Halkett, M.P.H., vice president for university development, "The need is still great." This year's alumni annual fund is again earmarked for the lab. Louis E. Fierro, M.D. '60, president of the Alumni Association, is appealing to all alumni—including those who have already contributed—to help fulfill the association's pledge. "It is essential that we complete this pledge that binds us all together. Your contribution is critically important to us," Dr. Fierro said.



The new Alumni Gross Anatomy Laboratory is bigger and brighter than the old lab, equipped with more teaching space, fresh air, natural light and hanging plants.

state-of-the-art facility has taken anatomy class from darkness to light and raised its academic, research and training capabilities for students and doctors to new heights.

"The gross anatomy lab is the showcase of the Medical Education Center," says Joseph Etlinger, Ph.D., professor and chairman of the Department of Cell Biology and Anatomy. "It is probably the most spectacular facility of its type in the country." Witness the dramatic increase in the number of new medical students who had multiple acceptances to other schools, Dr. Etlinger says. "This year, 46 percent of the College's new medical students—versus 27 percent last year—had multiple acceptances to other schools. In my opinion this is due primarily to the Medical Educa-

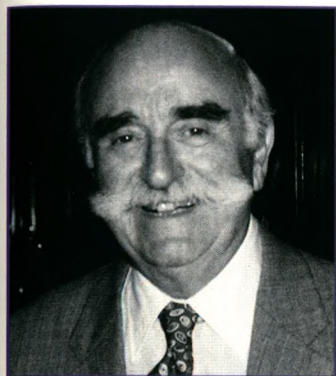
were in a basement," says the first-year student. "The cadavers are gloomy enough, and then to be in a dark basement—it's like life and death." Katie Llewellyn, who also had several offers, says the lab was another plus for NYMC: "It made my decision easier." Teviah Sachs appreciates the respect and humanity the new lab brings to anatomy. "It seems more respectful to have the cadavers in a nice place," he says.

Catherine Halkett, M.P.H., vice president for university development, says the gross anatomy lab is a limitless tool, multiplying the possibilities of what the College's students, researchers and clinicians can learn and accomplish. "This lab will have a lifelong learning function, not only for new students but for the continuum of being a physician."

among the entire class," he says. When needed, portable, soundproof walls can reconfigure the space into four or five different modules. "This way we can have different things going on at the same time," Dr. Pravetz says. Digital cameras, video monitors and speakers enable students throughout the room to observe a procedure at one table. The lab has separate changing areas with showers and lockers for students and faculty, as well as cold and warm rooms, and embalming rooms, x-ray light boxes, dry boards for teaching and presentations and hands-free sinks for washing and rinsing anatomic specimens. There is also a faculty office, teaching preparation areas, and extensive storage space for equipment, anatomic models and slides. ♦

Victor Altchek, M.D. '42

Assumes Leadership of Medical Dynasty



Victor Altchek, M.D. '42

Ask Victor Altchek, M.D. '42, about himself and he'll change the subject. He would rather talk about his family. His children (his son's a doctor), seven brothers and sisters, (two brothers became doctors) and at least ten nephews and nieces (all doctors) fill him with pride. But his greatest admiration is for his late brother, Salvator Altchek, M.D. '34, who died in September. Revered as a great humanitarian, Salvator treated *all* people, especially the poor, for as little as \$5 and often for nothing. Victor doesn't mention that he has followed in his brother's footsteps.

A retired general surgeon, Dr. Altchek was born in 1919 in New York City where he lived with his family on Fifth Avenue and 110th Street. The youngest of eight, he was one of three Altchek children to become a doctor and the third to attend New York Medical College. (Two of his nephews and one great-nephew also attended NYMC: David Shapiro, M.D. '71, Edgar Altchek, M.D. '66 and Martin Altchek, M.D. '49). His parents, Rachel and David, were poor, hardworking Sephardic Jews from Salonika, Greece, who immigrated to New York in 1914. Among the many values they instilled in

their children, "tzedakah" (good deeds) was supreme. It inspired Emanuel Altchek, M.D. '26, to pay Salvator's tuition to medical school, and for Salvator to pay Victor's in turn.

Doing good deeds has been a constant theme in Dr. Altchek's life. "We weren't interested in finance. We were interested in helping people," Dr. Altchek says. His son, Douglas Altchek, M.D., a New York City dermatologist, says his father has been a great humanitarian. "My father operated on numerous people throughout his long surgical career for no money. He would go in the middle of the night to the hospital to perform emergency operations, often without getting paid," he says. When a small plane hit the Empire State Building in 1945, Dr. Altchek—an intern at the time—grabbed an emergency kit and went to the most devastated floor in an attempt to help the wounded. The kit turned out to be an obstetrical kit. Nevertheless, Dr. Altchek improvised, beginning an impressive career in general surgery.

"My father was always a master technician and always able to do operations with lightning speed and accuracy," Douglas Altchek says. "He could do a thyroidectomy in 15 minutes, a gall bladder in an hour, and a colon section in an hour. I never saw anybody who could operate with as much speed and precision as my father." After graduating from New York Medical College, Victor Altchek did his residency at Beth Israel Hospital in Manhattan. He also trained at Bellevue Hospital in pediatric surgery. In 1954 he joined an HMO, the Queens

Long Island Medical Group, now affiliated with North Shore University Hospital.

Victor Altchek retired six years ago. He performed his last operation on his last day of work, at age 76. "He was still sleeping at the hospital once a week and would have continued. But I told him, 'You're 76, you've paid your dues,'"

is mother to one-year-old Michael.

Kevin P. Sullivan, M.D. '96, has joined the medical staff of Fairlawn Rehabilitation Hospital in Worcester, Mass. Dr. Sullivan is a physical medicine and rehabilitation physician specializing in spine problems. He also practices physiatry with The Boston Spine Group at the New England Baptist Hospital.

Dale F. Wilson, M.D. '96, is the proud mother of Nicole Barbara Sasso, who was born September 11, 2001 at 4:55 a.m. Dr. Wilson is married to Philip John Sasso, M.D.

Rona R. Fromowitz, M.D. '97, completed her medical-pediatric residency at University Hospital and Medical Center at Stonybrook in 2001 and has been in private practice with Crystal Run Healthcare in Orange County, N.Y. She practices internal and pediatric medicine and lives in Monroe, N.Y. with her husband and two-year-old daughter, Ariella.

Mary Grace Pagaduan, M.P.H. '97, is working as a family support specialist for the American Red Cross, helping families of victims killed in the September 11 attacks on the World Trade Center. She is based in New Canaan, Conn.

Bryan Hauser, M.D. '98, a family practice physician, has joined the medical group of Dartmouth-Hitchcock in Jaffrey, N.H.

Yu-Fang Lin, M.D. '98, has joined the departments of pediatrics and medicine at Arden Hill Hospital and Horton Medical Center in Middletown, N.Y.

Jason E. Roth, M.D. '98, finished his residency in internal medicine at Eisenhower Army Medical Center at Fort Gordon, Ga., and stayed on as a staff physician in the internal medicine clinic. In June he was deployed to Bosnia as part of the International Peacekeeping Force. He married Amy Rowley on May 19, 2002.

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Glenn E. Bulan, M.D. '95, has joined the staff at Eye Health Vision Centers in North Dartmouth, Mass. Dr. Bulan specializes in pediatric ophthalmology and adult strabismus. He is clinical assistant professor in the department of ophthalmology at Brown Medical School in Providence, R.I. He also has appointments at Rhode Island Hospital/Hasbro Children's Hospital, Women and Infants Hospital and Kent County Hospital.

Gerard P. Curran, M.D. '95, a former major/doctor in the U.S. Army, just completed a six-month tour of duty in Afghanistan/Uzbekistan where he was based primarily at Bagram. During his deployment and enroute to Womack Army Hospital his wife, Lara, gave birth to their second son, Luke.

Lawrence J. Fliegelman, M.D. '95, completed a fellowship in facial plastic and reconstructive surgery in June 2001. Specializing in otolaryngology, he is in private practice in Fairfield, Conn. He is also an attending physician at St. Vincent's Hospital in Bridgeport and at Bridgeport Hospital. *In error, Dr. Fliegelman was listed as a graduate of the class of '90 and employed at St. Vincent's Hospital in New York City in the last issue of Chironian.*

Lisa Forman, M.D. '95, completed her residency at Mt. Sinai Hospital in New York City and is an attending pediatrician/emergency room physician at Elmhurst Hospital in Queens, N.Y.

Eugene Spagnuolo, M.D. '95, has joined the department of emergency medicine at Horton Medical Center in Middletown, N.Y.

Ajay Bajwa, M.D. '96, has joined the staff of Gaston Memorial Hospital in Gastonia, N.C. He is a cardiologist with The Sanger Clinic in Gastonia.

Efrat (Effie) Lobel, M.D. '96, is an attending physician in gastroenterology at Kaiser Permanente in Woodland Hills, Calif. She is married to Richard Katz and

Douglas Altchek says. But for Victor, doctoring was never about paying dues. It was about having the privilege of caring for people. As his son Douglas says, "None of us really made a lot of money in medicine, but we were never in it for the money. We're in it to have a good time and help people along the way." ♦

Helping Children Function and Cope Come with a Speech Language Pathology Degree

Robyn Rosenberg is one of those people who can't say no. When people aren't asking for her help, she is looking for ways to help people. Since graduating from the Speech Language Pathology Program in the School of Public Health last year, she has found plenty.

Rosenberg, CCC-SLP '01 (Certificate of Clinical Competency in Speech-Language Pathology), teaches special needs children at Royle Elementary School in Darien, Conn. Her students' disabilities include autism, non-verbal learning disorder, Asperger's, Rett and Prader-Willi syndromes, cortical blindness and mental retardation. She works with kids on a wide range of skills: language, articulation, answering questions, critical thinking, problem solving, swallowing and memory. Many of these skills may appear unrelated to speech or language, but all of them—even memory—are connected.

Rosenberg explains, "People typically store information in an organized manner by grouping things in their head. People with language difficulties have trouble understanding word meanings, so when they store information they don't know how to recall it." Oral-motor difficulties, like not being able to lift the tongue high enough to produce the sounds needed for word pronunciation, are common among her students, and they must work on strengthening the muscles and elements in and around their mouths—the tongue, lips and jaw. Children who have trouble swallowing learn that turning their head or

tucking under their chin will trigger the swallowing reflex.

Rosenberg does more than teach children. She comforts and counsels parents who are coming to terms with their child's disability. "I help par-



Robyn Rosenberg, CCC-SLP '01

ents help their children be as successful as they can be," she says. Speech Language Pathology students are required to take counseling, which is one of the program's assets, she points out. "I had so much hands-on opportunity at the College, with gross anatomy and cadavers and working in a hospital. Friends in other graduate programs used to call me and say, 'We never took that class but you did, can you help me?'"

Rosenberg began sharing her knowledge of speech language pathology long before graduate school. As an undergraduate in Ithaca College's speech language program in Ithaca, N.Y., she was asked to lecture

the entire physical therapy department on augmentation and alternative communication, techniques and tools that can help children communicate, such as pictures, sign language, and computers.

She was also invited to lecture a multicultural education class about working with non-mainstream children. "We have different populations in our classes, including people with special needs," she says. Even as early as high school Rosenberg volunteered her time, assisting in a speech therapy class where she helped children practice target sounds. That's when she realized she wanted to work with kids like these.

What appealed to her was working in a regular school, where special needs children learn alongside those who don't have special needs. It is a controversial approach to education. Some say that children learn best when grouped with peers who share function and skill levels. Others, like Rosenberg, argue that integrating disabled and non-disabled children enriches education for both. "Kids sometimes learn best from their peers. Plus, they get to socialize. They're treated like they're one of the gang," she says. Fully functioning children benefit too, learning skills they wouldn't be exposed to ordinarily, as well as toler-

ance, she says. "One of my kids is using modified sign language and some of the other kids are picking it up. How terrific is that?"

Outside the classroom, Rosenberg continues to share her knowledge and time. She led a district-wide staff development day on augmentation and alternative communication for teachers, social workers and other speech patholo-

**"I help parents
help their children
be as successful
as they can be."**

gists. She rewrote her school's protocol for evaluating students' oral-motor skills. She is helping to run the Darien district's new assistance technology lab, which furnishes the technical support—wheelchairs, occupational therapy tools, and voice output systems—to help students function. She is also supervising a second-year speech language pathology student from NYMC. And, she is serving as the acting alumni president for the Speech Language Pathology Program.

"It's such a great feeling to know that I have this background and I can share it," Rosenberg says. "I'm a teacher, I'm a facilitator, I'm an educator. I can't say no." ♦

PAUL MIEYAL, PH.D. '00 Brings Science and Business Together

If the word "scientist" conjures up an image of an introvert who wears taped-together horn-rimmed glasses and stuffs pens in his shirt pocket, then you should meet Paul Mieyal.

Having shattered the stereotype of a scientist, he doesn't come close to acting like an egghead. He also doesn't work anywhere near a laboratory. Dr. Mieyal, who earned his Ph.D. in pharmacology in 2000 at the Graduate School of Basic Medical Sciences, uses his scientific expertise to help Wechsler & Company, Inc., a private investment firm in Mt. Kisco, N.Y., make sound investments in the biotechnology industry. Some may say Mieyal abandoned the science world for the business world. He says he's got the best of both.

"There is a misperception that scientists in the business world have left science," he says. "But scientists on the business side are exposed to a wide range of cutting edge scientific research. We become a little more clinical than research-oriented because we have to look at the applied side. I'm still exposed to cutting edge research that's being done and therapies that are being developed. I'm just not performing the experiments."

An investment analyst, Dr. Mieyal evaluates the financial health of biotechnology companies. He studies clinical data to see if the technologies, drugs or therapies they are developing are likely to be approved by the FDA and become profitable. "I get to be exposed to the intellectual side of science without taking the risks. Actually, I'm taking risks with someone else's money," he says.

As Dr. Mieyal sees it, the difference between science and business is the difference between idealism and practicality. In the academic world there is more interest in what can be discovered. The business world is more pragmatic.



Paul Mieyal, Ph.D. '00

"It doesn't necessarily matter if something's interesting. It has to be something you can commercialize, something there's a demand for," he says. And the demand must be substantial. "Ideally, a drug company would be able to work on drugs for every disease, whether it affects 10 million or 1,000 people. But if you can only sell the drug to 1,000 people, the pharmaceutical company will go bankrupt," he says. That's where academic science comes in. "The responsibility is with academia to do the research because it's not always feasible for a commercial company," he explains.

Dr. Mieyal was headed for a career in academia—as a university professor or a researcher at a pharmaceutical company—when he graduated

from Case Western Reserve University in 1993. While studying at New York Medical College and doing research in the pharmacology laboratory of John Quilley, Ph.D. (now associate professor of pharmacology), he found himself wanting to *apply* what he knew. "I started exploring career paths where I could still leverage my scientific background," he says. Already interested in business, Dr. Mieyal took some basic accounting and economics courses, hoping to find a job with a financial institution that needed his scientific know-how. Wechsler & Company did. The firm hired him while he was defending his thesis and he's been there ever since.

"There's always something new," he says. "I see a full range of medical applications that are coming out to treat every disease imaginable. I'm definitely able to use my scientific background to understand things."

He has had to adjust, however. "In the lab I was active on my feet all the time, creating my own research and experiments. Now I spend time sitting in a chair at the computer, looking at others' research and taking it at face value," he says. Colleagues do make a little fun of him at work. "If I use any big words they like to call me an intellectual," he says, chuckling. But Dr. Mieyal—who doesn't wear horn-rimmed glasses—stops the stereotyping there: "I usually wear contact lenses except at the computer. I can function at athletic events, and I'm proud to say I've never owned a pocket protector, but I'm still a scientist at heart." ♦

MILESTONES

Geoffrey A. Booth, M.D. '99, has joined the internal medicine department of the Samsom Santa Barbara Medical Foundation Clinic in Santa Barbara, Calif.

Heather Davis, M.S. '99, who became a paramedic as an undergraduate, is clinical coordinator for UCLA's Center for Prehospital Care in Los Angeles, Calif. Considered an EMS leader, she has spoken at national conferences, co-written a textbook, created a program for the LA County paramedics and served as an expert writer on the EMS Educator Curriculum Revision project.

1980s

Anthony Arciola, M.D. '80, has relocated to Hudson and Valatie, N.Y. He welcomes communication with any alumni and wishes great success and happiness to all.

Neil D. Borack, M.D. '80, was awarded the Ronald Reagan Founder's Award from the Leadership of the Republican Party in the United States Senate in November 2001.

Melodie Morgan-Minott, M.D. '80, is a private practice psychiatrist at Western Reserve Medical Center in Kent, Ohio. She specializes in treating adults and seniors for anxiety, depression, bipolar disorder and issues related to aging. Dr. Morgan-Minott was selected by *Cleveland* magazine as a "top doc" for 2002.

Matthew J. Arduino, M.S. '81, works for the Centers for Disease Control and Prevention in Atlanta, Ga. In June he was awarded the Health and Human Services Secretary's Distinguished Service Award for the World Trade Center and Anthrax Emergency Response and Investigation Team. He also won the CDC/ATSDR (Agency for Toxic Substances Disease Registry) Charles Shepard Science Award for Prevention and Control for Scientific Excellence for co-authoring an article, "Control of Vancomycin-Resistant Enterococcus in Healthcare Facilities in a Region," published last year in the *New England Journal of Medicine*.

Jeffrey Boscamp, M.D. '81, is chief physician and chairman of the pediatrics department at The Joseph M. Sanzari Children's Hospital at Hackensack University Medical Center in Hackensack, N.J. He is also the hospital's chief of infectious diseases.

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and an associate professor of pediatrics at the University of Medicine and Dentistry of New Jersey.

Gregory Walter, M.D. '81, is an emergency medicine specialist at Palmyra Medical Centers in Albany, Ga., where he lives with his family.

Herman Ambris, M.D. '82, is in solo practice at Assertive Rehabilitation Medical Services in Brooklyn, N.Y.

Vincent Panella, M.D., '82, was named top gastroenterologist in *New York* magazine's June 2002 issue, which featured the "Best Doctors in New York."

Bruce W. Peek, M.D. '82, board certified in internal medicine, cardiovascular diseases, and interventional cardiology, has joined the staff of the Verde Valley Medical Center in Cottonwood, Ariz. He is also an adjunct clinical professor at Kirksville College Medical School in Phoenix.

John Cosgrove, M.D. '83, was recently appointed to the Alumni Association's Board of Governors. He is on the staff of North Shore University Hospital in Manhasset, N.Y., where he does minimally invasive breast and bariatric surgery. He is married to **Patricia Barry, M.D. '83**, who is in a private breast imaging practice.

Mark J. Cerbone, M.D. '84, is director of emergency psychiatry at Saint Francis Hospital in Poughkeepsie, N.Y. He is married to Margaret Lehan, a nurse practitioner/psychiatric nurse at the hospital.

Elizabeth Clark, M.D. '85, is chief of the newly formed division of geriatric medicine in the department of medicine at Lenox Hill Hospital in New York City.

Jesse L. Sandlin, M.S. '85, opened an orthopaedic medical practice in May 2002 with offices in Wheeling and Glen Dale, W. Va.

Marc Zisselman, M.D. '87, was named one of the "Top Docs 2002" in the May 2002 issue of *Philadelphia* magazine. He specializes in geriatric psychiatry and lives with his wife and their two children in Philadelphia.

Gari D. Carabin, M.D. '88, is a general ophthalmologist, affiliated with Hackensack Medical Center and Holy Name Hospital in New Jersey.

John Edmund Smith Jr., M.D. '88, was appointed in May 2002 to the hematology/oncology division in the department of medicine at Easton Hospital in Easton, Pa.

William V. Begg, III, M.D. '89, was nominated in June for the prestigious Dr. Melville G. Magida Award. Each year the Fairfield County Medical Association and The Richard and Hinda Rosenthal Foundation present the Magida Award to a physician under 40 who has shown "a notable capacity for treatment and care and a special sensitivity to patient-physician relationships." Dr. Begg, an emergency room physician at Danbury Hospital in Danbury, Conn., is an active participant in the community, has spoken at various high schools on the deleterious effects of teenage drinking and participated on numerous panels to promote safe driving and rally against the use of drugs. He lives in Newtown with his wife and three young children.

Gene Conrad, M.P.H. '89, formerly on the faculty of Wake Forest Medical University and New York Medical College, recently published a book, *"Selecting and Monitoring a Nursing Home."*

Scott McLaughlin, M.D. '89, is leaving Primary Care of Southbury (Conn.) to become director of Guilford Medical Associates, a rural access healthcare facility in Dover-Foxcroft, Maine.

1970s

William Bracciodieta, M.D. '71, has been named regional chief medical officer for Health Net of California and Health Net of Oregon. He will oversee medical and quality management for Health Net's Western Region.

Robert A. Kaplan, M.D. '71, has been appointed clinical professor of pediatrics at the University of California, Irvine. He was also elected outstanding voluntary faculty member there for the practice of pediatrics at Miller Children's Hospital of Long Beach, Calif.

Eric D. Weston, M.D. '71, is a gastroenterologist with Digestive Disease Associates of Clearwater, Fla. He says his most recent milestone is becoming a grandfather to Daniel Drouzas Weston.

Ann M. Barbaccia, M.D. '72, recently became the first physician and woman to chair the Board of Governors at Mercy Medical Center in Rockville Centre, N.Y.

Lorey H. Pollack, M.D. '72, has been reappointed chairman of obstetrics-gynecology at Mercy Medical Center in Rockville Centre, N.Y.

Albert "Pat" Henry, M.D. '73, and **Pat Hutton, M.D., '74**, former medical school partners, share an orthopaedic practice in Orange Park, Fla. In addition

to having been a medical missionary in Kenya, Tanzania, and the Ivory Coast, Dr. Henry plays trumpet and piano with the Clay Community Band, a group of doctors and nurses who enjoy making music together. He says his only regret about being a physician is not having enough free time to work on his music.

Adam Hurewitz, M.D. '73, is chief of pulmonary critical care at Winthrop University Hospital in Mineola, N.Y.

Alan Kohrt, M.D. '73, is a clinical associate professor of pediatrics at the Children's Hospital of Philadelphia and the University of Pennsylvania. Married and the father of seven, he is also the District III board member of the American Academy of Pediatrics.

Robert Davis, M.D. '74, a psychiatrist in private practice in New York City, is also an artist. Dr. Davis exhibited his watercolor ink stamp collage work in September at the Salisbury Bank and Trust in Lakeville, Conn. where he also has a home. He donated all proceeds from sales of his work to the Paul Taylor Dance Company.

Patrick M.J. Hutton, M.D. '74, is vice speaker in the House of Delegates for the Florida Medical Association and the American Medical Association delegate for the State of Florida.

Robert Dawe, M.D. '75, has been named chief of orthopaedic surgery at Bridgeport Hospital in Bridgeport, Conn. Dr. Dawe specializes in pediatric and spinal reconstructive surgery and is a clinical instructor at Yale University School of Medicine in New Haven.

James J. LaRosa, M.D. '75, was appointed in May to be medical director of the 425-bed Franklin Hospital Medical Center in Valley Stream, N.Y.

Elon Schwartz, M.D., '75, has a full-time, private psychiatry practice in Hartsdale, N.Y.

Brian Altman, M.D. '76, is practicing orthopaedic medicine at the Columbus Center for Orthopaedics and Sports Medicine in Whiteville, N.C. He and his wife Kim have five children.

John Carmody, M.D. '76, an orthopaedic surgeon, has opened a practice in Galax, Va., and joined the medical staff at Twin County Regional Hospital. Dr. Carmody lives in Galax with his wife Fran.

Edmund LaGamma, M.D. '76, has been appointed a consulting member to the medical staff of a Carmel, N.Y. hospital affiliated with the Putnam Hospital Center.

WORKING IN THE MIDDLE EAST

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airplanes. "As many as 6,000 men would jump out of airplanes and 1 percent would see me," he says.

Domestic duty for both doctors ended with the beginning of the U.S.-Afghanistan conflict. "Everything changed with September 11," Dr. Hirshman says. Within three months of each other, he and Dr. Curran were deployed to the Middle East, each leaving behind a wife, child and baby on the way. Dr. Curran went to Uzbekistan, where he set up a small hospital and treated casualties among members of the Northern Alliance. Then he was off to Afghanistan, where he looked after detainees, conducted strip searches, provided dental and wound care and set up a clinic. Dr. Hirshman went to Kuwait, where he provided obgyn and basic medical care for military personnel, their families as well as U.S. allies.

Now discharged, both are home for good. Dr. Hirshman is joining an obgyn practice in Dallas and spending time with his toddler Benjamin, and newborn son, Jory while his wife, also an obgyn, completes a residency in urology. "I'd been away for almost a year of Benjamin's life. I didn't think I could continue doing that," he says.

Dr. Curran, who will be an emergency room physician at the Midstate Medical Center in Meriden, Conn., is happy to be raising his sons, Brendan and Luke, without the prospect of having to uproot them. "It [the Army] was really demanding and prepared me for what the civilian world will throw me," he says. "Now I'm going home to be a dad." ♦

M I L E S T O N E S

Jack Rubenstein, M.D. '76, has been appointed director of medicine at Franklin Hospital Medical Center in Valley Stream, N.Y., part of the North Shore Long Island Jewish Health System. Dr. Rubenstein is the senior physician and general partner at Internal Medicine Associates of East Hills, LLP, in Roslyn Heights. He is a clinical associate professor of medicine at New York University School of Medicine, as well as a diplomate in internal medicine, nephrology and geriatric medicine.

Scott Cutler, M.D. '77, and his wife, Robin, are delighted that their daughter, Beth, has entered the New York Medical College class of 2006.

Lucille C. Norville Perez, M.D. '79, is an associate director at the NIH in Bethesda, Md. Dr. Perez is also the 102nd president of the National Medical Association in Washington, D.C., the nation's oldest and largest association representing African-American doctors. She has belonged to the NMA for nearly 20 years and is past chair of its committee on community medicine and public health.

1960s

Robert E. Hassler, M.D. '60, is practicing obstetrics-gynecology in Shallotte, N.C.

Carl M. Marchetti, M.D. '60, is a senior vice president at the Jersey Shore Medical Center in Neptune, N.J. In a December 2001 logging accident his right thumb was amputated and successfully reattached and is now fully functional.

Paul Brenner, M.D. '61, counsels the chronically ill and teaches at the University of California, San Diego School of Medicine.

Stanley R. Sakowitz, M.D. '62, is practicing allergy and immunology and is the proud grandfather of Ari, age 4, and Talia, age 2.

Elliot Grau, M.D. '64, is employed with Indian Health Services in Fort Totten, N.D. He plans to spend one or two more years there before retiring. Dr. Grau and his wife, Jackie, live in Lakota, N.D.

Richard Allen, M.D. '65, has been appointed the American Medical Association's representative to the American Board of Medical Specialties (ABMS). He also has been elected

vice-chair of the American College of Obstetrician Gynecologists (ACOG) section to the AMA. He is a clinical professor in the department of obstetrics-gynecology at Oregon Health Sciences University.

Qwie T. Chew, M.D. '65, having retired from full-time radiology practice, plans to travel and pursue other interests.

Franklin L. DiSpaltro, M.D. '65, has been named president of the American Society for Aesthetic Plastic Surgery (ASAPS), which represents close to 1,900 board-certified plastic surgeons who focus on cosmetic surgery. Dr. DiSpaltro is an attending physician in the department of plastic and reconstructive surgery at Saint Barnabas Medical Center in Livingston, N.J., and a member of its Board of Trustees.

Kathleen M. Perry, M.D. '67, is an obstetrician-gynecologist with a private practice, Richmond Gynecology, in Randall Manor, N.Y. She is also a senior attending physician in obstetrics-gynecology at Staten Island University Hospital and has received the American Medical Association's Physicians' Recognition Award six times.

David Herz, M.D. '69, is director of neurosciences at Saint Mary's Mercy Medical Center in Grand Rapids, Mich. He is also a practicing clinical neurosurgeon and professor of surgery at Michigan State University.

Richard N. Hirsh, M.D. '69, brought a mammography-teaching mission to Hanoi, Vietnam in May 2002. He is organizing a breast cancer conference for the National Institute of Oncology in Havana, Cuba, which will take place February 2-8, 2003.

1950s

Michael L. Daly, M.D. '57, retired from the University of Minnesota family practice department in 1995. He spends his time building and using canoes and kayaks and playing with his 13 grandchildren, including a set of triplets.

Joan Easton, M.D. '57, is working part time, traveling, playing tennis, and enjoying it.

Robert J. Blankfein, M.D. '58, retired from the practice of neurology on June 30, 2002. He and his wife are enjoying retirement, including swimming and ballroom dancing.

In Memoriam

Salvator Altchek, M.D. '34, died on September 10, 2002. He was 92.

M. Paul Lazar, M.D. '47, died on September 24, 2002. He was 79.

Franklyn J. Simecek, M.D. '47, died on June 11, 2001 at Emerald Ridge Nursing Home in Solon, Ohio. He was 78.

John D. Gossel, M.D. '50, died on May 14, 2002 at the Holmes Regional Medical Center in Melbourne, Fla. He was 86.

John P. Murphy, M.D. '50, died on July 31, 2002 at Greenwich Hospital in Greenwich, Conn. He was 83.

Meredith Montague III, M.D. '51, died on November 8, 2002 in Houston, Texas. He was 77.

Henry Francis Stoltmann, M.D. '54, died on July 2, 2002 at Needham Nursing Home in Needham, Mass. He was 73.

H. Jeff Zeidner, M.D. '57, died on April 20, 2002.

Edgar A. Parmer, M.D. '58, died on September 5, 2002. He was 73.

Edward Pendagast Jr., '58, died on September 17, 2002 at his home in Easton, Conn. He was 70.

Robert S. Schindler, M.D. '58, died on August 26, 2002. He was 72.

Eugene Harbilas, M.D. '62, died on September 29, 2002. He was 70.

Jack M. Clemente Jr., M.D. '63, died on October 21, 2002 at St. Barnabas Medical Center in Livingston, N.J. He was 64.

Willard D. Smith, Jr., M.D. '69, died in May 2002.

Mary Judith Murphy, M.D. '78, died on May 16, 2002, at the age of 59.

Faculty

Roy Hertz, M.D., professor of obstetrics and gynecology from 1972-1973, died on October 28, 2002, in Hollywood, MD. He was 93. Dr. Hertz won an Albert Lasker Medical Research Award in 1972 for co-discovering a treatment for choriocarcinoma, a highly malignant cancer originating in the placenta of pregnant women.

Milton Terris, M.D., former chairman of the Department of Community and Preventive Medicine, died at his home in South Burlington, Vt. on October 3, 2002. He was 87. Dr. Terris headed the department for more than a decade and stepped down in 1980. He founded and was past president of the National Association for Public Health Policy and the Society for Epidemiological Research. He also founded the Journal of Public Health Policy and had been its editor for more than 20 years.

Calendar of Events

January 26 - 30, 2003

Winter CME Seminar
Dorado, Puerto Rico

May 17, 2003

Annual Alumni Banquet
The Plaza Hotel, New York City

May 18, 2003

Alumni Reunion Luncheon and Annual Meeting
Alumni Center

May 22, 2003

Commencement
Carnegie Hall, New York City

For additional information,
please call the Alumni Office at (914) 594-4556.

Paging all Doctors!

If you worked on Welfare Island (now Roosevelt Island) before 1973, the Roosevelt Island Historical Society wants to hear from you! Please contact Judith Berdy, president, at 212-688-4836 and add your story, photos, writings and memorabilia to the society's historical archives.

We're on the Web

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