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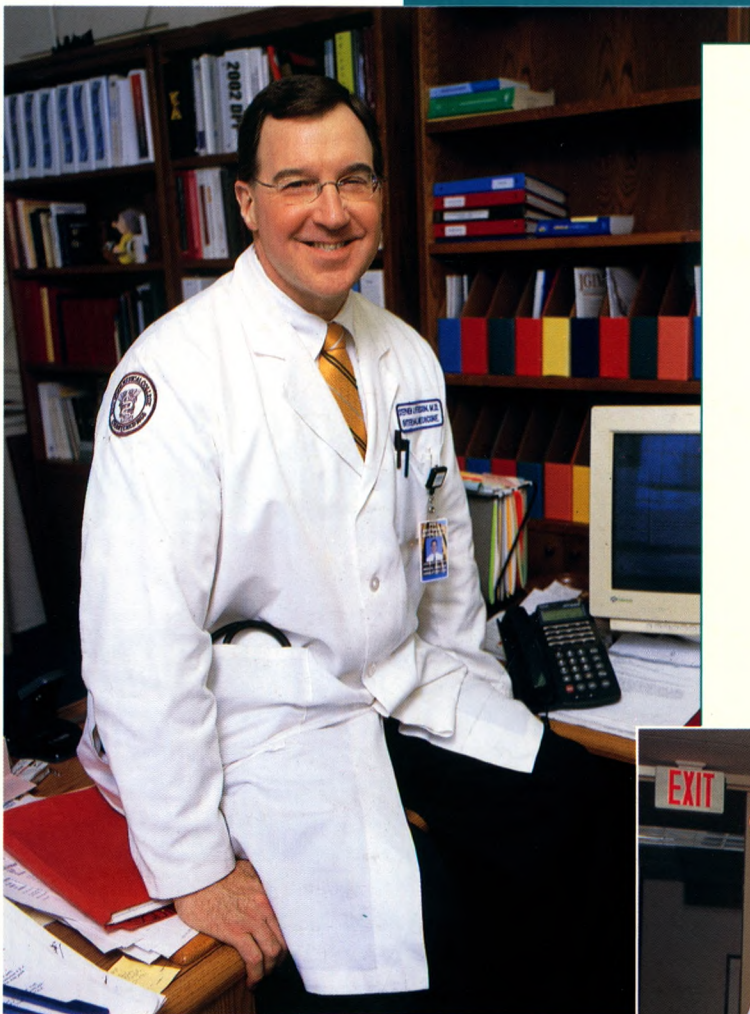
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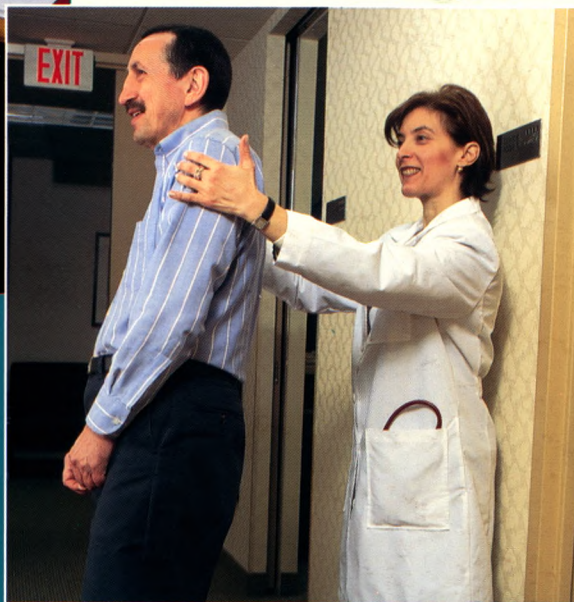
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Chironian

New York Medical College



Spring/Summer 2003



INSIDE

The Doctor Who Lives to Teach

Battling Hepatitis C Becomes Personal

Movement Disorders Draw Neuroscience Focus

PEDIATRIC CARDIOL

PINS ILLS ON REDUCED BLOOD FLOW



Julian Stewart, M.D., Ph.D., ministers to patients with orthostatic hypotension and other complex disorders with his intellect and wit.

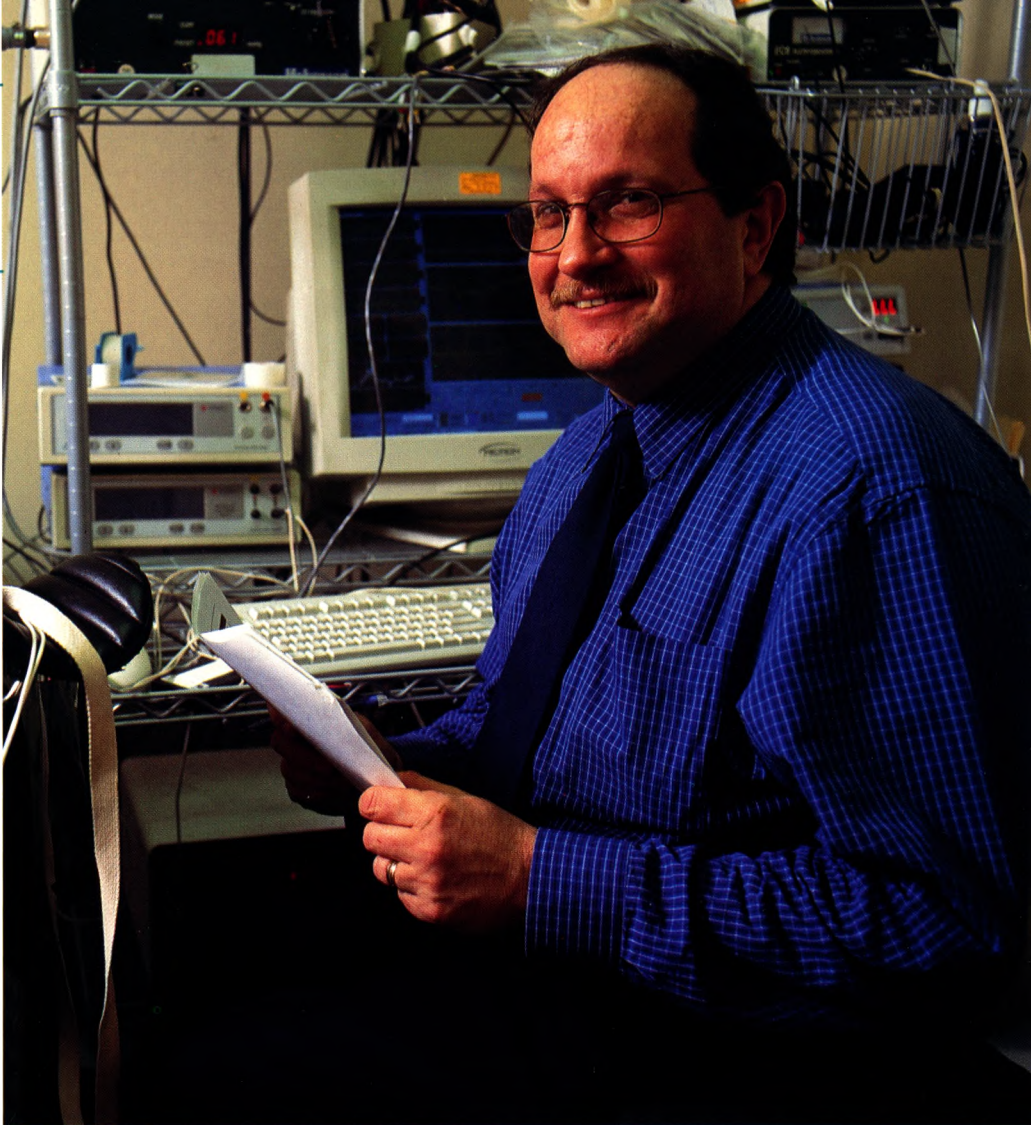
In the film "The Sunshine Boys," George Burns says to Walter Matthau, "I hear your blood don't circulate." And Matthau replies, "It circulates ... but not everywhere."

If one could remember feeling lightheaded for the first time, it might be a childhood recollection of suddenly jumping up from a lying position. The brief dizziness passed and that was the end of it—unless you fainted. But even without fainting, if the sensation kept recurring and resulted in a day-to-day disability, with weakness caused by a withering muscle mass, it could leave the sufferer homebound. This pattern of symptoms has always been difficult to identify and treat, to say nothing of cure. But at New York Medical College, an expert in the field named Julian Stewart, M.D., Ph.D., professor of pediatrics and physiology, is dedicated to his work in the Center for Pediatric Hypotension, which he induced the College to establish in 1998. Not only does he diagnose the debilitating wooziness that afflicts mostly adolescents as chronic fatigue syndrome (CFS), but also enlists them as subjects in his NIH-funded research study entitled "Circulatory Dysfunction in Chronic Fatigue Function." In teenagers CFS is attributable to a circulatory defect termed postural tachycardia. So incapacitated by the syndrome they are willing to undergo hours of lying still for testing, tethered to an array of devices Stewart has wired together, the youths are thrilled to finally know what ails them.

One of a kind

"I study circulatory phenomena in human beings in real time—while it is happening," says Dr. Stewart. His sidekick in these endeavors is Marvin S. Medow, Ph.D., associate professor of pediatrics and of physiology, who monitors the eclectic collection of conventional physiological monitoring equipment that provides the crux of the neurovascular testing. Sidekick is indeed the operative word; to watch these researchers work harder than Laurel and Hardy to keep their young charges smiling and their spirits rising is to witness a bravura performance. It has been said that talking with Dr. Stewart is like having a conversation with Robin Williams, but this comment by internist Stephen J. Peterson, M.D. (please see page 7) puts Stewart's affect in better perspective: "Julian Stewart's off-beat sense of humor belies his serious and often intimidating intellect."

There are four research studies under Dr. Stewart's aegis and all deal with the connection he has found between blood flow and phenomena like orthostatic (standing upright) intolerance, obesity, insulin resistance in the metabolic syndrome and osteoporosis in perimenopausal women. His website at syncope.org (syncope is the medical term for fainting) indicates the scope of his research and where it is going. Having joined the pediatric cardiology faculty in 1983, Dr. Stewart began writing papers on exercise, circulation and the effect of nitric oxide on endothelial cells in the physiology laboratory of Thomas Hintze, Ph.D. '80 "I had the research bug and I wanted to do something investigational," says Dr. Stewart. "From this basic science research on circulation, I adapted methods to measure cardiac function and blood flow in teenagers."



ABOVE: A brilliant scientist who uses his off-beat humor on his teenage patients, Julian Stewart, M.D., Ph.D., is the resident expert on fainting (syncope) and circulatory phenomena in human beings. Some of them are so incapacitated by dizziness they must take to their beds.

Collateral symptoms

Starting with youths who had fainted, Dr. Stewart perceived a wide range of disability. "Fainting is often driven by upright posture. It may be compounded by warm environments that reroute blood to the skin and away from the central circulation. A decrease in brain blood flow produces light-headedness. However, the fainting response involves an abrupt decrease in heart rate and blood pressure, resulting in unconsciousness. And emotional stimulation may produce a fainting reflex in some people. This explains the standard definition of fainting as 'a transient loss of consciousness and simple postural tone produced by a sudden decrease in brain blood flow.' Of course this doesn't obviate the need to rule out cardiac causes for fainting like arrhythmias, coronary artery disease, TIAs and long QT syn-

drome," he emphasizes, making good history taking of paramount importance.

The next step in Dr. Stewart's program involved Jose Munoz, M.D., associate professor of pediatrics and of microbiology and immunology, and chief of pediatric infectious diseases at Westchester Medical Center. "He started me off on patients with chronic fatigue syndrome, and contrary to what the literature suggested, these patients did not faint," Dr. Stewart insists. "During tilt-table testing, they experienced an unusual increased heart rate associated with hypotension and they looked sick as death. They had nausea, fatigue, and dizziness and though they felt hot, they were pale as ghosts. But when the tilt-table was made flat, they immediately felt better," he says.

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MESSAGE FROM THE DEAN



RALPH A. O'CONNELL, M.D.
Provost and Dean, School of Medicine

In its Strategic Plan of 1996 New York Medical College articulated its core educational mission: To insure all graduates are prepared to practice their profession in a competent and responsible manner and are equipped to meet the changing requirements of their profession. I would like to take this opportunity to bring you up to date on our continuing progress in meeting this goal and point out some of the challenges we face over the next few years.

Medical education can be seen as a continuum of lifelong learning—undergraduate medical education leading to the M.D. degree, graduate medical education and continuing medical education. New York Medical College has extensive programs in all three phases; this report will concern the undergraduate segment. During the academic convocation last fall, 187 members of the Class of 2006 entered the medical profession by participating in the White Coat Ceremony. The majority, at 53 percent, are women. Selected from 5,606 applicants, they came from 90 of the best colleges and universities across the country. Their academic credentials are very strong, with GPAs and MCAT scores above the national average. Although 46 percent of the matriculating students had also been accepted to other medical schools, they chose to enter New York Medical College. Only five years ago the number was 10 percent. Our reputation is growing nationally; applications are up 10 percent for next year's Class of 2007.

The faculty—1,200 full-time and 1,400 voluntary—is strong and dedicated. Members of the voluntary faculty make major contributions to medical education, participating in clinical correlations in the basic sciences, precepting students in primary care, teaching in the clinical years and serving on faculty committees. In the academic year 2002, 307 members of the entire faculty contributed 679 pieces to the scientific literature. Several received coverage in *The New York Times*. Four new department chairs were appointed—Ira S. Schwartz, Ph.D., microbiology and immunology; Joseph L. Halbach, M.D., M.P.H., family medicine; Brij Singh Ahluwalia, M.D., neurology; and Raj Murali, M.D., neurosurgery. While searches are still in progress for the chairs of rehabilitation medicine and orthopaedic surgery, a number of new junior and senior faculty have been recruited to the university.

The Curriculum Committee has been reorganized to provide integrated institutional responsibility for curriculum design, management and evaluation. The Clinical Skills course has been restructured to emphasize not only the physical

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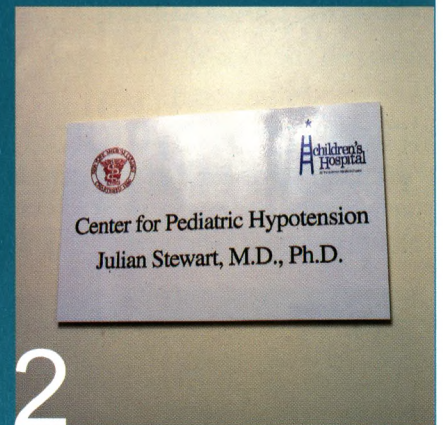
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On the Cover:

Stephen J. Peterson, M.D., professor of clinical medicine, has always remained in the background until Chironian insisted he accept his 15 minutes of fame. The director of the Section of General Internal Medicine, now a vice chairman of the Department of Medicine, teaches and practices medicine with "infectious enthusiasm."

The molecular structure of the Hepatitis C helicase enzyme, shown as a ribbon diagram, is in the act of unwinding its viral genome, the last step in reproduction. The large blue, gray and red ribbons are distinct sections that power the helicase protein. David Frick, Ph.D., has discovered key regions for reproductive activity (represented by colored stick figures), which he believes are targets for future drug development.

Maria Sangiorgio, M.D., who specializes in Parkinson's disease and other movement disorders, is using the "pull test" on Frank Pavonetti to measure progression of the ailment. Physical diagnosis is de rigueur since there is no blood or radiologic test to provide a definitive diagnosis.





PEDIATRIC CARDIOLOGIST

(continued from page 3)

Intolerable symptoms

"What all of them have is postural tachycardia syndrome (POTS). Their blood pressure falls and it becomes

ease or mononucleosis, more in women than men, from menarche to menopause. Is there a connection to sex hormones? I don't know, but I do know that women who faint cannot blame it on POTS..."

"There certainly is a connection with how blood circulates in women, which is quite different from men. Blood pressure is decreased, blood volume is smaller and much of it is located in different regional circulations such as the pelvis. Women get POTS 5 to 1 over men and I think it will continue to be primarily a women's issue. When I see a man who thinks he has it, it often turns out he really doesn't have it or it's a usually brief post-viral effect."

When the autonomic nervous system malfunctions it is known as dysautonomia. Dr. Stewart has become a member of the National Dysautonomia Research Foundation and currently is a member of its Medical Advisory Committee. "POTS is a category of disease more than a single illness," he explains. "It has the same effect as being profoundly dehydrated even though the patients really are not. What they

have is a form of shock, with circulatory insufficiency brought out by being upright. In these adults it's like hemorrhaging into yourself."

Lacking norepinephrine

"In the same POTS patients, fluid and blood drop by gravity into the lower part of the body and are trapped in the legs. It takes about 5 or 10 seconds, and they swell up because not enough norepinephrine is being released to make the blood vessels contract. We can give patients an oral substitute, Midodrine, which can be taken all the time. There

also are a group of girls, and some boys, who are hyperflexible, such as in their connective tissue. Many have an inherited condition called Ehlers-Danlos syndrome. In these patients blood often collects or pools in the spleen, intestines and liver, producing a low blood pressure.

"Another POTS group affected we call purple people—malperfused, with too little blood going to extremities where the blood vessels appear to be overly contracted. We are in the process of publishing this as preliminary data suggest a defect in their endothelial-mediated vasodilation [the ability of their blood vessels to expand]."

Dr. Stewart's research on blood flow continues to lead him in other directions. He is following the tangent of an utterly mainstream trail to osteoporosis, which has been targeted by one Ken McCleod, Ph.D., chairman of the department of biomedical engineering at SUNY Binghamton. Dr. McCleod is interested in musculoskeletal conditions and has detected a relationship between abnormalities in blood flow and the skeletal system. He also has invented non-pharmacologic methods for advancing nutrient flow, which may improve bone density and retard the progression of osteoporosis; one of them is a mechanical device. Dr. Stewart explains:

"Dr. McCleod has invented a vibrating plate that you stand on or put your feet against. I can tell you that an absence in blood flow exerts a detrimental effect on the structure and function of muscle and bone. That is our finding..."

"As a physician there is an advantage in studying human physiology despite the reality that much of the human scientific research is carried out by Ph.D.s. They can't use pharmaceuticals," he points out. To observe Dr. Stewart when he is diagnosing and treating patients in a room filled with equipment that looks left over from creating Frankenstein, you know why he calls them his "victims." They, knowing he says it in jest, are simply grateful to be with a doctor who recognizes their plight and understands enough to help. ■

ABOVE: For nearly three years, Joanne Schepis, 18, of Wappingers Falls, N.Y., could barely get out of bed. Her pediatrician referred her to Julian Stewart, M.D., Ph.D., after a virus left her so woozy she was unable to function. The sensors, wires and electrodes connect to physiological monitoring equipment that measures her circulatory functions. Assisting in the neurovascular testing is Marvin S. Medow, Ph.D.

impossible to remain upright without intolerable symptoms. It is the most common cause of chronic orthostatic intolerance and it is suffered by a majority of teenagers to some degree," he continues. "This is what I study...It became fairly clear to me that patients develop external signs of malperfusion including purple and swelling from the knee down—it can even be from the thigh down—while their hands and feet get cold and purple. It's from a lack of blood flow. It seems to run in families and it can last months to years, often developing after an infection from Lyme dis-

The Thrill of the Diagnosis ... **THE ROAR OF THE CROWD**

**Beloved by his
students and
patients alike,**
Stephen J. Peterson,
M.D., is recasting
the Department of
Medicine, which
recently made him
a vice chairman.

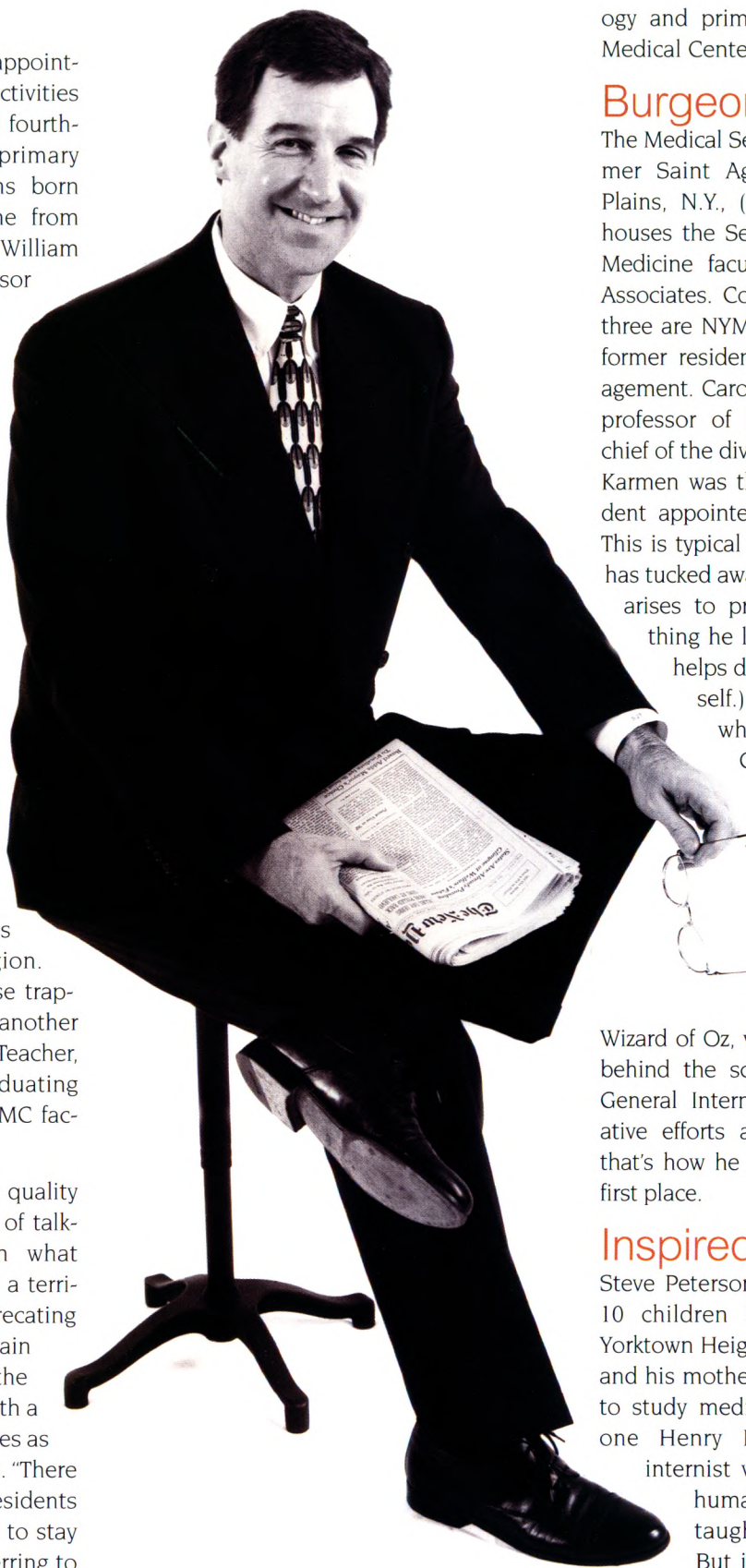
Is Stephen J. Peterson, M.D., first and foremost a doctor or a teacher? Could be it's a draw. The new vice chairman of the New York Medical College Department of Medicine not only has a gift for both professions, he personifies the master diagnostician and educator par excellence with enough passion for a dean of the School of Medicine to call it "an infectious enthusiasm." At the same time there is the other Steve Peterson who handles the organizational end of things without making waves—well, waves maybe, but not the tsunamis it can sometimes take to get things done. In one capacity or the other, he seems to be everywhere and involved in everything, yet he's managed to keep his name out of the limelight—until this promotion. The name, incidentally, gives the impression that Dr. Peterson is a Swede. There *was* one in the family many generations ago, but this Peterson considers himself strictly Irish. "I'm the original blarney," he says, "and I was born on St. Patrick's Day to boot. Three grandparents came from Ireland...I have six brothers and three sisters." Still planning his first trip to Ireland in celebration of his recent fiftieth birthday, the too-tall leprechaun smiles, leans forward and confides, "I think I'm the happiest of all." And then he shuts down the discussion of his personal life by admitting, "I only let people get so close."



Best teacher

According to Dr. Peterson, his appointment makes the educational activities of the residents and third- and fourth-year medical students his primary responsibility, a job he seems born to have. The official tap came from William H. Frishman, M.D., the William and Barbara Rosenthal Professor and Chairman of the Department of Medicine, adding another virtual stripe to Peterson's omnipresent white coat and a new position to his growing CV. His impressive collection of titles includes professor of clinical medicine; director, Section of General Internal Medicine; program director, Internal Medicine Residency Training; and director of the Internal Medicine Section at Westchester Medical Center (WMC). A sign of his spreading influence is his elevation earlier this year to governor-elect of the American College of Physicians, representing the 1,500 internists and internist subspecialists in the Hudson Valley Region. Though he clearly relishes these trappings of achievement, there is another label he covets more: Best Teacher, awarded by every single graduating class since he has been an NYMC faculty member.

"The award is based not on the quality of teaching but on the volume of talking," Dr. Peterson laughs in what sounds like Eddie Murphy with a terrible case of croup. He is self-deprecating to a fault, as if he has to explain away his success in revealing the intricacies of medical science with a delivery and enthusiasm that does as much for him as for his students. "There are an inordinate number of residents in internal medicine who prefer to stay here," he admits, the "here" referring to the College and its affiliated teaching hospitals. Citing statistics from the year 2000, he reports, "Half the residents in medicine went on to subspecialties and half stayed in primary care, with most preferring to do fellowships in cardiol-



ABOVE: The 1994-1995 Annual Report dedicated to New York Medical College faculty members included Stephen J. Peterson, M.D., as a "Best Teacher" chosen by the students. This personal comment appeared under his photograph: "I teach because this is one of the few vocations where they pay you to talk!"

ogy and primary care at Westchester Medical Center."

Burgeoning practice

The Medical Services Building at the former Saint Agnes Hospital in White Plains, N.Y., (now operated by WMC) houses the Section of General Internal Medicine faculty practice called MRA Associates. Comprising five physicians, three are NYMC graduates and two are former residents under Peterson management. Carol Karmen, M.D., assistant professor of medicine and associate chief of the division, is in charge. ("Carol Karmen was the first female chief resident appointed at WMC," he informs. This is typical of the minutiae Peterson

has tucked away in case the opportunity arises to praise a colleague, something he likes to do, especially if it helps deflect attention from himself.) There are MRA internists who help staff the Taylor Care Center nursing facility at WMC, while others oversee the medical care of inmates at the neighboring Westchester County Penitentiary. But it is clearly

Dr. Peterson, like the Wizard of Oz, who is pulling the strings behind the scenes in the Division of General Internal Medicine. These creative efforts are his strong suit, and that's how he got into medicine in the first place.

Inspired choice

Steve Peterson grew up in a family of 10 children living in Westchester's Yorktown Heights. His father was a CPA and his mother was a nurse. His desire to study medicine though came from one Henry Ludemann, the family internist whom he calls "the best human being on earth, who taught physical diagnosis."

But inspiration aside, though he did well at Stepinac High School in White Plains and Fairfield University in Connecticut, he came up short when all three medical schools he applied to turned him down. With plenty of will, he began looking for a

way to get into medical school. He wound up making an inspired and resourceful choice, and though it took him halfway around the world, it ultimately led back to where he started and the career he sought.

Enter an uncle who ran the third largest copper mine in the world—on the island of Cebu in the Philippines. This is where Cebu Doctors' College of Medicine is located. Peterson was able to take all his classes in English, and when fourth-year rotations rolled around, he contacted a family friend, James McClean, M.D., chief of medicine at what is now Sound Shore Medical Center of Westchester. Peterson was able to do his medicine, pediatrics and surgery rotations in New Rochelle and that was just the beginning. One of the attendings was Barry Goldstein, M.D., who also was on staff at Metropolitan Hospital Center, where Karl Adler, M.D., was chief of medicine. Goldstein introduced them and the rest is history. Dr. Peterson did his residency in internal medicine at Met, the College's oldest affiliated hospital, and eventually became Dr. Adler's first chief resident. "I must single out two outstanding educators during my training whom I feel I owe my career to—Karl Adler and William Chokas [55]. And Dr. Adler continues to be a mentor to me," he says. (Dr. Adler later was appointed dean of the School of Medicine, but left to become president of St. Vincent's Hospital in Manhattan. He now serves as healthcare adviser to His Eminence Cardinal Edward Egan. Dr. Chokas, who is retired, holds the faculty appointment of professor emeritus of medicine.)

Following footsteps

"I initially had a hard time deciding between medicine and surgery, but I think it was the thrill of making a diagnosis that appealed to me more than anything," Dr. Peterson recalls. He also chose to practice academic medicine, which, more important, set the stage for his teaching career. What followed were several positions in the NYMC system—at Metropolitan Hospital where he oversaw the housestaff and the third-year medical clerkship; at Lincoln Medical and Mental Health Center, where from 1988 to 1993 he

was in charge of internal medicine, medical student clerkships and the residency training program for the formerly College-affiliated hospital; and since 1994, at Westchester Medical Center, directing the internal medicine clerkship. Then came a year of living dangerously. Dr. Peterson played the part of an attending physician in the ER (the Mark Greene role, for devotees of the television show "ER") at Westchester Square Hospital in the Bronx. He smiles in recounting a very telling incident:

"A nurse about to go off shift asked me to write down the drug and dose for a patient. She blurted out, 'Please don't teach me the pathophysiology of the patient's disease or the pharmacology of the drug. Just give me the drug and

“I initially had a hard time deciding between medicine and surgery, but I think it was the thrill of making a diagnosis that appealed to me more than anything.”

dose and I'm going home.' It made me realize, just when I was wondering whether to come back to the College, that I didn't just like to teach, I had to teach. That's who I am. Teaching students gives you something back; it reminds you every day to keep your ideals intact, and not to become jaded. The students remind you why you went into medicine... It's a tremendous thing to be exposed to them and I know I could never go anywhere that I didn't teach or see patients."

Prodigal returns

And so he accepted the offer of Steven Gambert, M.D., then acting chairman of the Department of Medicine, to head up the Section of Internal Medicine and direct the Internal Medicine Residency Training Program.

Now that nearly a decade has passed and he's acquired the wisdom and title of vice-chairman, Dr. Peterson is willing to talk about the players and events he considers worth praising:

"I think education in medical school has changed a lot. Our school is really on the cutting edge in primary care, and the appointment of Marty Grayson as senior associate dean is the icing on the cake. [Martha Grayson, M.D., was his attending when Dr. Peterson was an intern at Metropolitan Hospital.] It was very good for me to see the impact she had on a patient's cure by the sheer force of her personality..."

"Susan Kline [M.D., executive vice dean, academic affairs, and vice provost, university student affairs,] has been a big factor in importance for the school. She's been very supportive of people who care about the students and she continues to make sure you care. I've been a fan of hers for years." And in his own backyard, it's his boss who earns the ultimate accolade:

"Dr. Frishman is one of the greatest teachers I've ever seen in the profession. Period." This is what Dr. Frishman has to say:

"Steve Peterson is a remarkable individual, an outstanding teacher, a gifted clinician and a highly capable academic leader. He is devoted to both the academic and clinical missions of the hospital and College and gives an all out effort on behalf of the two institutions. Moreover, he has the best singing voice in the department, a real Irish tenor. In an inter-medical school songfest, he would be the clear choice to represent NYMC. I would put him at the level of a Crosby or a Como."

While some observers may think Dr. Peterson's dual roles at the College and Westchester Medical Center require a delicate balance, he will have none of it. "All you have to do is do your job and stay out of everyone's way," he insists. "I feel no stress at all. Regardless of the ups and downs between the medical school and the hospital, the people running both places have been professional enough not only to keep us out of it, but also to have never put us in the middle of it." ☒



ABOVE: When David N. Frick, Ph.D., won a new lease on life with a transplant, he turned his research on the hepatitis C virus, the perpetrator that destroyed his liver. The HepC virus is unusually difficult for the molecular biologist to investigate because no one has yet been able to grow it in the laboratory.

Molecular Virologist Strives to Eradicate Hepatitis C Virus

David N. Frick, Ph.D., aims to disable enzymes that enable the deadly virus to replicate.

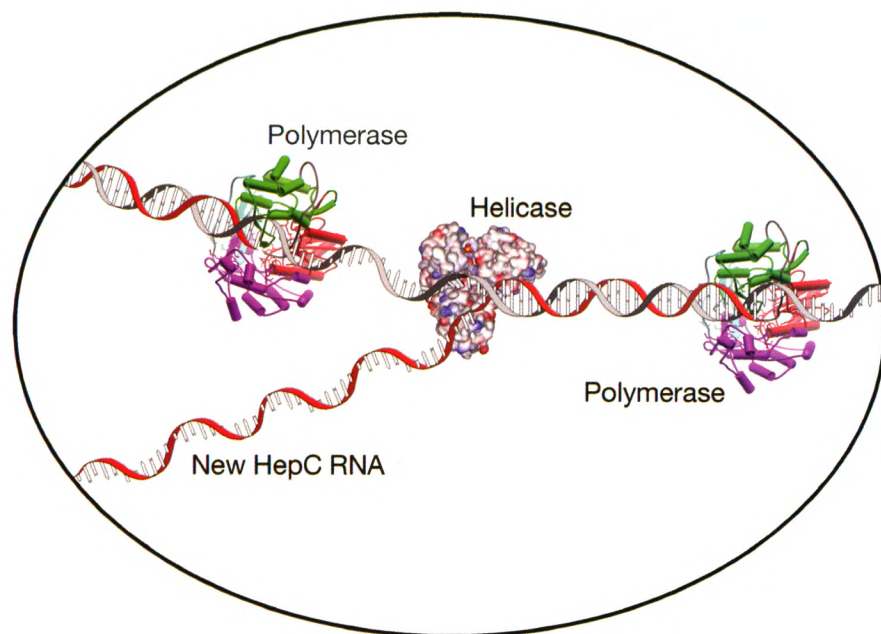
The hepatitis C virus (HCV) plays dirty. It can take decades before symptoms appear, leaving a victim blissfully unaware while it insidiously destroys the largest organ in the body, the liver. The researchers investigating the virus—now called HepC in medical jargon—continue to be thwarted by their inability to grow it in the laboratory. HepC prefers the human body, although it does infect one animal, the chimpanzee. But these primates are too expensive to procure for research, which may be one reason why HCV remains the leading cause of known liver disease and the most common reason for liver transplantation. Statistics reveal 85 percent of patients will retain the virus and become chronic carriers, while 20 percent of them will develop cirrhosis of the liver. And 25 percent of these cirrhosis sufferers will wind up with end state liver disease. Cancer, a transplant or death are what the future will then hold in store.

Very personal

In the U.S. hepatitis C infects 1 out of 55 people; David N. Frick, Ph.D., is one of them. The molecular virologist joined the faculty of New York Medical College in August 2000 as an assistant professor of biochemistry and molecular biology. Having experienced the life cycle of liver disease and come out the other side, he has changed his life. Dr. Frick is investigating HepC with an NIH RO1 grant for \$1,000,000 over five years, plus another \$150,000 in funding from the American Liver Foundation that named him recipient of its Scholar Award last year. What earned him this stake was his goal of developing new methods to discover

drugs targeted against the hepatitis C infection, which prior to being identified by the Chiron Corp. in 1988 was known as non-A, non-B hepatitis. In the inner sanctum of the Office of Research Administration, he's been called "benevolently intense," "meticulous and thorough," and "hard working."

It is estimated that the virus has infected some 4 million Americans and 170 million people worldwide. Standard treatment combines alpha interferon, an immune system protein, and ribavirin in pill form. This combination can produce severe side effects and has limited usefulness in that it eliminates the virus in only half the patients using it. That comes as no surprise since neither interferon nor ribavirin was designed specifically to attack HCV. Scientists assume the therapy



ABOVE: In depicting how the hepatitis C virus replicates at the molecular level, Dr. Frick's visual illustrates how two enzymes produced by the RNA virus—polymerase and helicase—enable the virus to reproduce itself. The polymerase synthesizes new RNA (red) from old RNA (gray). The helicase unwinds new RNA from old RNA so more RNA can be produced. Dr. Frick's team studies how these enzymes work and how certain chemicals and drugs might prevent the enzymes from making new virus.

“Eventually I decided I wanted to figure out why I responded to the therapy when most patients don't. There I was with a new liver and trying to decide what to do with my whole new life.”

works by giving a general boost to the immune system to help it fight the virus. However the new hepatitis C drugs that are entering clinical trials now are designed to home in and interfere with the very enzymes needed by the virus to replicate.

Poster boy

In 1995, while he was finishing up his Ph.D. from The Johns Hopkins University, Dr. Frick needed emergency surgery for an inflamed appendix. That diagnosis was proved wrong, when the surgeon discovered that his 26-year-old patient had an advanced case of cirrhosis of the liver instead. With input from the family they determined the HCV infection had likely originated

at birth. “I had to be transfused because of an Rh incompatibility between my mother and father. In the sixties, a significant portion of the blood supply was infected, especially after people began selling their blood,” he explains.

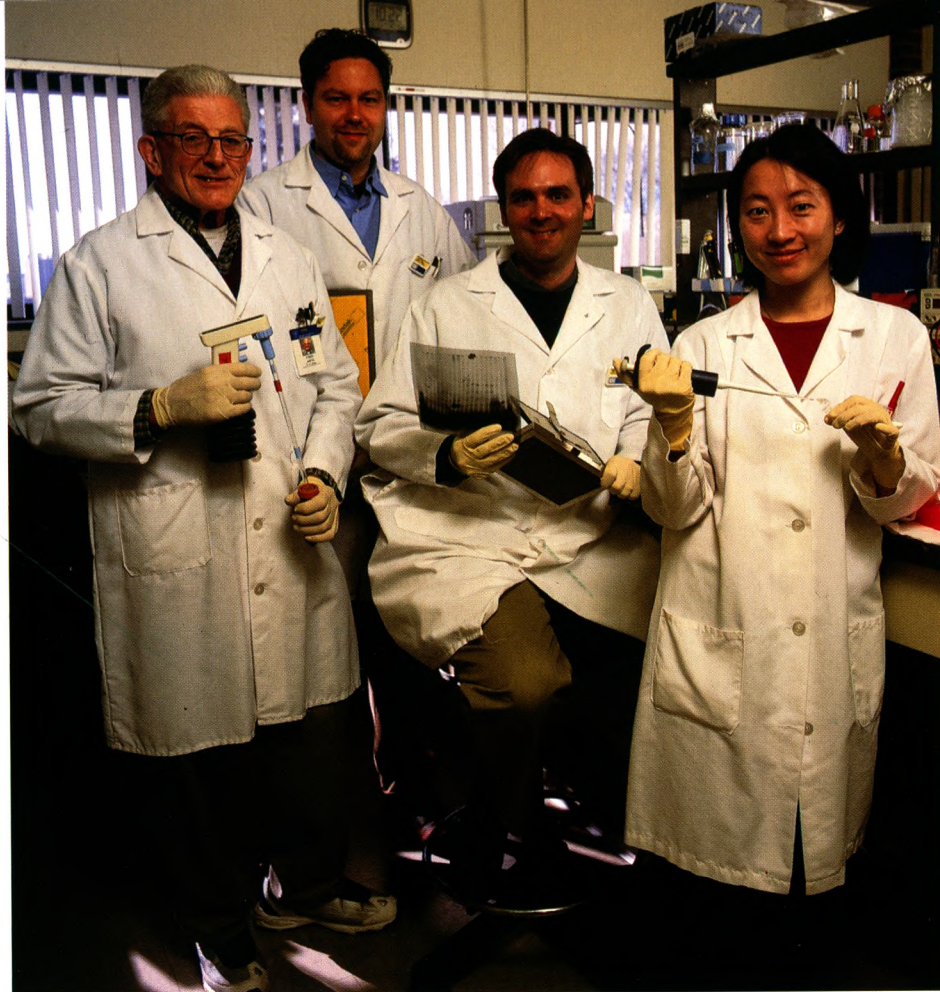
Two years later he underwent transplantation at Beth Israel Deaconess Hospital in Boston, where he had been a Harvard Medical School post-doctoral fellow studying biological chemistry in the laboratory of Charles C. Richardson, Ph.D. Though he initially suffered a couple of rejection episodes, Dr. Frick has been well for some time. “I could feel a change in my energy level and my mood right away,” he says, talking about the liver as “your metabolic engine.” Still, there have been pluses and minuses. The youthful looking scientist is quite pleased with one side effect of the medication he must take to prevent rejection of the transplanted liver. “Cyclosporine promotes hair growth,” he smiles, pointing to his full head of hair. “But as a consequence of taking cyclosporine I have high blood pressure and I have to take a calcium channel blocker to counteract that...”

“After the transplant I took antiviral meds, the combination therapy for a year,” he continues. “It was the worst year of my life, with fever and chills and flu-like symptoms, and I had to inject it into my stomach myself. I was one of the first patients to try it after a transplant and I’m one of the lucky ones to have responded. My new liver is infected, but the virus is now undetectable. However viruses can be sneaky and the HepC could be latent. In virology you don’t usually talk about a cure...”

“Eventually I decided I wanted to figure out why I responded to the therapy when most patients don't. There I was with a new liver and trying to decide what to do with my whole new life.”

HIV relates

Dr. Frick arrived in Valhalla to find his department actively engaged in how polymerases work. Made famous by HIV research, polymerase is an enzyme critical to replication of the virus that causes AIDS. “These are macro-molecular machines that catalyze reactions, for example, in making viral RNA for the HIV genome. In our lab we are synthesizing DNA copies of the HepC virus



ABOVE: The professional team working under David N. Frick, Ph.D., seated, is investigating the helicase enzyme that enables the hepatitis C virus to replicate. From left are Fred Jaffe, Ph.D., an organic chemist; Ryan Rypma, Ph.D. candidate; and Angela Lam, Ph.D. in biochemistry, who is doing a post-doctoral stint. The detectives are looking for leads to biochemical mechanisms that will stop the virus from replicating.

from the NIH in order to make the viral proteins it uses to synthesize its own genome. In other words, we are trying to understand how the “machine” functions so we can begin to design a drug like AZT,” he says.

Any drug’s effectiveness is easy to assess in the case of HIV, he explains, because you only have to introduce the drug and count the clearing of the virus. It’s not so simple with HepC, Dr. Frick points out, since the virus can’t be cultured in the laboratory. Examining HepC on a biophysical level, he has targeted two enzymes: polymerase (which makes the HepC RNA) and helicase, for his research. Though he still spends some time synthesizing HepC viral polymerase (he is currently looking to hire someone to do this in his lab), about 80 percent of his efforts go to HepC helicase. “Chiron has sequenced the entire HepC genome.

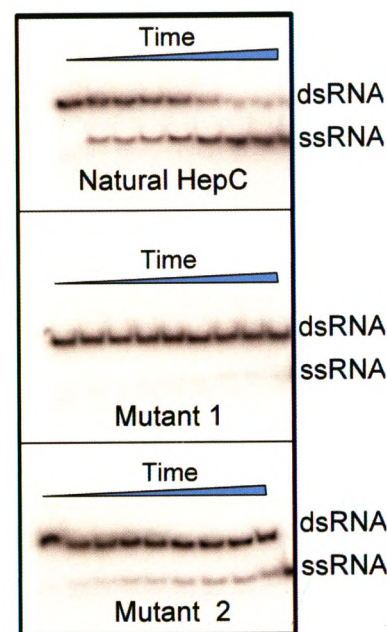
There are 9,000 base pairs and it looks something like the yellow fever virus,” he advises. “It may be the first time a disease has been discovered solely by DNA technology.”

Virus foil

Before you can read or copy the information in DNA or RNA, the double helix must be split apart. It is the HCV helicase enzyme that unwinds the duplex RNA to produce positive-sense single stranded RNA. During replication, RNA interacts with the helicase at a specific nucleic acid-binding site, according to a report from the Annual Meeting of the American Association for the Study of Liver Diseases given by David Bernstein, M.D. [“Our research was highlighted in that report,” advises Dr. Frick.] Any molecules designed to target this area should prevent replica-

tion from occurring and be an attractive lead compound for future drug development.

While Dr. Frick says he has avoided collaborating with major pharmaceutical companies up to now, he does have an informal relationship with GlaxoSmithKline, which supplies certain proteins that cannot be made with his facilities. He carries on discussions with companies about essential elements like key amino acids and the differences between virus genotypes,



ABOVE: The x-ray of a gel displays the speed in which the Hepatitis C virus—double stranded RNA (dsRNA) is unwinding to become single-stranded RNA (ssRNA). Part of Dr. Frick’s research involves removing certain elements (amino acids) to find binding sites for drugs that can prevent the HepC virus from replicating.

all aimed at discovering something to inactivate the enzyme by binding and substituting for the real thing. Though Dr. Frick does not work on the actual drug discovery, he is no less valuable for his efforts in analyzing the mechanism of action to interfere with the helicase mechanism. The likelihood that what works against the “machine” of one virus will be relevant to other virus “machines” is enough to keep everyone interested. ☒

MOVEMENT DISORDERS

Shift to the Front Burner



Parkinson's disease, dystonia and essential tremor patients have entree to the newest therapies—from medications to surgery.

When the chairman of the Department of Neurology hired Maria Sangiorgio, M.D., it was a long time in coming for Brij Singh Aluwalia, M.D., eager as he was to fill the opening on his staff. Dr. Sangiorgio, who is anything but the uptight Parkinson's disease specialist portrayed by Robin Williams in the film *Awakenings*, is equally elated to be heading up the new movement disorders divisions at New York Medical College and Westchester Medical Center. Her surgical partner is Alon Y. Mogilner, M.D., Ph.D., a neurosurgeon who trained at New York University at the same time Dr. Sangiorgio was a resident. Both are assistant professors, Brooklyn-born and bred—a dream team with impeccable credentials who care not only for patients with

Parkinson's, but also with dystonia and related neurological disorders. Neither physician can offer a cure, but with medication and surgical intervention, they can contribute greatly to a patient's quality of life. This especially holds true for Parkinson's, a progressive degenerative brain disease marked by tremors, rigidity and muscle slowness resulting from the death of neurons that make dopamine, a neurotransmitter critical to the control of movement.

Dr. Mogilner signed on July 1, 2001, to specialize in "functional neurosurgery, modifying what is present in the neuro-circuitry, as opposed to the traditional concept of the neurosurgeon as one who "makes room" in the nervous system by, say, removing a tumor or decompressing the spinal cord," he says. "The armamentarium of the func-

tional neurosurgeon includes deep brain stimulation for movement disorders, spinal cord stimulation for chronic pain, implantable infusion pumps for pain and spasticity, tissue excision in epilepsy and other innovative therapies for neurologic disorders so far unresponsive to treatment."

Need referrals

Unlike, say, plastic surgeons, who are known to advertise their services, neurosurgeons rely on neurologists to send them patients. So the addition of Dr. Sangiorgio last November provided the missing link to starting a movement disorders service. Prior to her arrival, Dr. Mogilner performed the neurologic chores as well. Neurology Chairman Singh will tell you she was worth the wait. Credit also goes to his

neuroscience ally Raj Murali, M.D., professor and chairman of the Department of Neurosurgery, who assisted in the recruiting process even before he moved from St. Vincent's (Manhattan) Hospital in January to assume the department chairmanship in Valhalla.

Dr. Sangiorgio trained under pioneer Stanley Fahn, M.D., who established the field of movement disorders in the 1960s at Columbia-Presbyterian Medical Center in New York City. She calls him a clinically oriented investigator—"intuitive, compassionate and a man who remembers everything about his patients." It appears to have rubbed off on Dr. Sangiorgio, who schedules a minimum hour of her time for new patients. And now that she has earned this impressive position after 17 years of education and training, she is able to give her father the answer to his long-standing question: "When are you going to get a job?"

Maria Sangiorgio's CV reveals a bachelor's degree in biology-chemistry from Skidmore College, Saratoga Springs, N.Y.; an M.D. degree from Albany Medical College; and an M.S. degree in "Masters in Statistics Patient Oriented Research," a recently accredited and sponsored program by the NIH at Columbia University's School of Public Health. Following an internal medicine residency at New York University Medical Center-Bellevue Hospital, she completed another residency in neurology at Strong Memorial Medical Center in Rochester, N.Y. Then she undertook the Fahn fellowship at Columbia-Presbyterian, where she participated in several clinical trials of novel therapies for Parkinson's disease, and worked for one year as an attending neurologist at Maimonides Medical Center in Brooklyn.

Differing credentials

A worthy match for his associate is Dr. Mogilner, who began with a bachelor of arts and master of science in computer

science from Columbia University. He is a graduate of the NIH Medical Scientist M.D.-Ph.D. Training Program, having earned a Ph.D. in physiology and biophysics, all from the New York



ABOVE: Alon Y. Mogilner, M.D., Ph.D., believes the future of neuroscience is in neuromodulation—treating a variety of diseases by modifying the circuitry in the nervous system. The "functional" neurosurgeon uses a procedure known as deep brain stimulation when he operates on the brains of patients with Parkinson's disease.

University School of Medicine. "The neuroscience Ph.D. provided me with the tools to interpret the electrical activity of the brain that we record during surgical procedures. This is also how I find, with millimeter precision, the correct location to place the deep brain stimulating electrodes," he says. He stayed on at NYU Medical Center for all his training: internship in general surgery, residency in neurosurgery, fellow in functional and stereotactic neurosurgery, and chief resident of the department of neurosurgery. On the research side, Dr. Mogilner received The William H. Sweet Young Investigator Award presented by the American Association of Neurological Surgeons, Pain Section, presented at the American Association of Neurological Surgeons Annual Meeting in San Francisco, April 2000.

The truth is that Dr. Sangiorgio was a Parkinson's expert long before she ever

stepped into a hospital. "I was 10 when my mother first developed symptoms—pain, rigidity and stooped posture," says the doctor. "The lack of tremor misled physicians to discount

Parkinson's as the diagnosis. It is a misconception that one must have tremor as an essential element of the disease... Within a year she was started on Sinemet [L-Dopa]. She did well for about five years, the usual, and then she began having typical medication-related complications. The drug does not continue to have the same duration of efficacy leading to a wearing-off, or 'off-time,' as it is called. Doctors continued to increase the Sinemet dosage until limited by the dyskinesias, the involuntary movements that you see with Michael J. Fox... Eventually my mother became bedridden. My father took care of her for the 30-year duration of the disease

until the day she died."

Early start

Dr. Sangiorgio had decided to become a doctor in high school, while the family was attending Parkinson's support groups and she was doing Parkinson's volunteer work as well. Decades later, she has the opportunity to start a new program where there has been none before. "There is an advantage to being blessed with this challenge," she says. "I'm very independent and focused on my goals. But establishing a program from the ground up isn't accomplished overnight. And I still have some responsibility for inpatient and consulting chores."

Besides caring for a general load of neurology patients, Dr. Sangiorgio is ministering to 75 with movement disorders, including essential tremor, tardive dyskinesia and Tourette's syndrome. She also shares responsibility for stu-

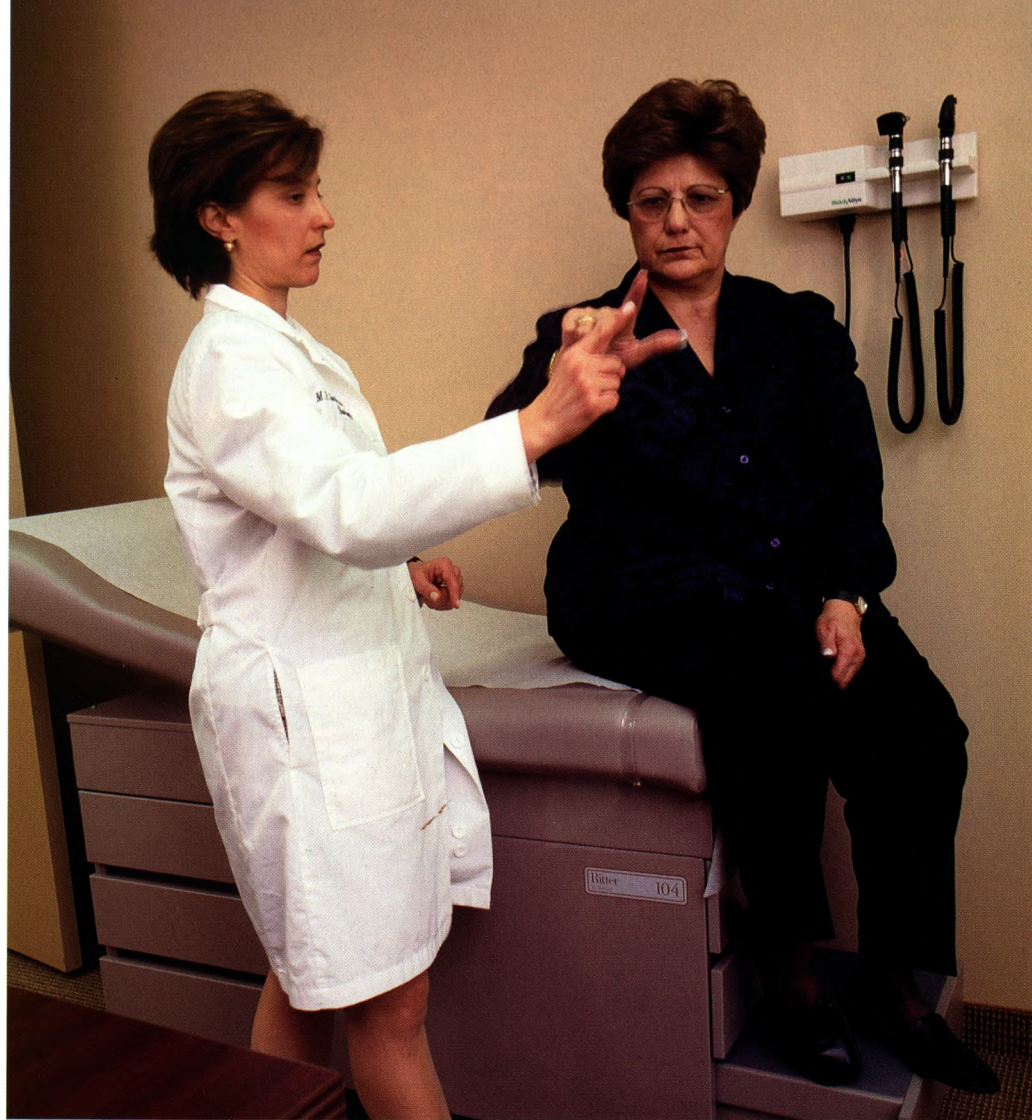
dent and resident lectures and assists in the second-year neuroscience course. Dr. Sangiorgio will admit to preferring ambulatory patient care: "I would like to participate in patient-oriented clinical research once I have the practice established. My forte is using my clinical skills ... Establishing a program like this is the realization of my lifelong dream. Although my mother never knew I became a physician, let alone a specialist in movement disorders, she would be incredibly proud, as is my father."

Perhaps the pride can help compensate for treating patients who will not be cured of their disorders and who ultimately will die of its complications. Eventually, when Dr. Sangiorgio can do no more with medication, she will consider whether the patient is a candidate for Dr. Mogilner and what he calls "the pacemaker for the brain." The procedure is known as deep brain stimulation; Medtronic, the manufacturer of the pacemaker-type device, calls it Activa Parkinson's Control Therapy. It works by electrically stimulating the subthalamic nucleus, paired structures in the center of the brain that play a crucial role in the organization and control of movement. Parkinson's patients have an abnormally hyperactive subthalamic nucleus, and physicians believe the electrical stimulation acts as a kind of "white noise," removing the chaotic activity and restoring a semblance of normal motor function.

It works

The patient is awake when hair-thin recording electrodes are placed in the subthalamic nucleus under computer guidance. Once the structure is correctly localized, it is stimulated to determine whether the characteristic tremor, rigidity and slowness have been reduced. After a positive result the electrode is permanently implanted and ultimately connected to a pacemaker placed in the upper chest wall.

"The patient uses a hand-held remote control to adjust the implanted electrode from the outside," explains Dr. Mogilner. "It can be turned off when you're going to sleep to save the batter-



ABOVE: There is no definitive test for Parkinson's disease. Until one is realized, neurologists like Maria Sangiorgio, M.D., will continue to base their diagnoses on tests for rapidity, spontaneity and agility in movement. Phyllis Gagliardi is trying to keep up with Dr. Sangiorgio, who is rapidly clicking her thumb and index fingers, but is only able to do it more slowly.

ies, which need replacing after four years. But most of my patients refuse to turn it off at all...Numerous studies have shown a 60 to 80 percent improvement in the standard scoring system used to grade the severity of Parkinson's disease." While Dr. Mogilner was involved in some of the first such surgeries in the U.S. in 1998, it was initially performed in France in 1993 and has only recently received FDA approval. "There are French and American patients who went abroad to get the operation more than 10 years ago who continue to have great benefit from the surgery," he adds.

It is not always easy to convince patients and their families that any surgery is worth the risk. Dr. Mogilner finds fault with many of their physicians. "It is a tragedy when doctors who

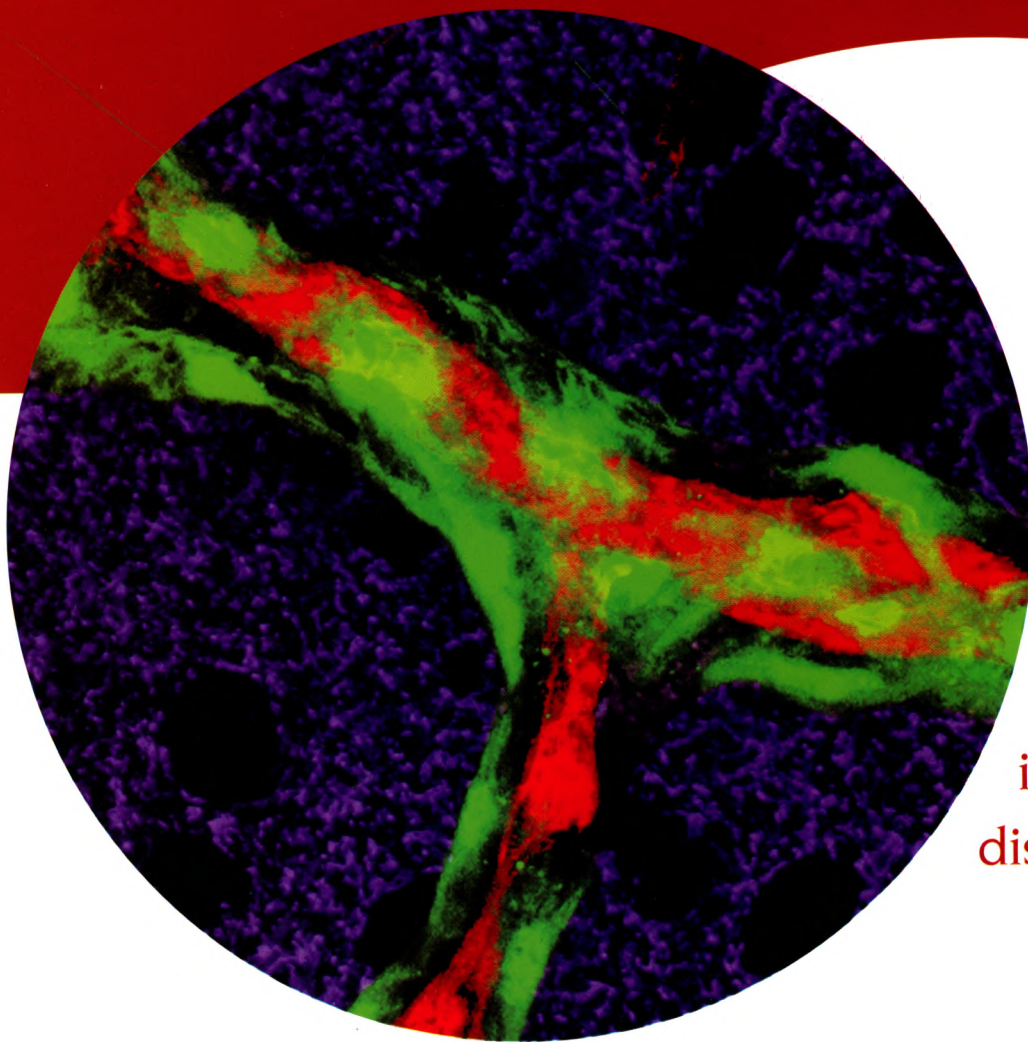
are not fully versed in the benefits of surgery recommend against it with a 'surgery is not for you' piece of advice," he laments. "Medications are a mixed bag and surgery can increase the 'on' time three to four hours a day for these patients. That's why we need more doctors like Maria Sangiorgio, who understand the benefits. Unfortunately, most Parkinson's patients are not under the care of neurologists with expertise in movement disorders and their patients are possibly being deprived of the benefits of the newest therapies."

Testing first

Before surgery is scheduled, prospective patients undergo neuropsychological assessment to rule out anything that might preclude their suitability for

(continued on page 28)

NEUROLOGIC DISORDERS Thrive From a Common Cause: Glutamate



Maiken Nedergaard, M.D., Ph.D., claims the toxic neurotransmitter makes brain tumors incurable, and questions its role in Parkinson's disease and ALS.

When *Nature Medicine* calls, especially to announce your submission has been chosen as the cover story, it is cause for celebration. Maiken Nedergaard, M.D., Ph.D., professor of cell biology and anatomy, has been published in this very prestigious journal before, but this time, her relentless assault on the deadly disorders of the brain and spinal cord was

conducted with the assistance of a very sophisticated and expensive microscope she had added to the College inventory. The study results more than justify its cost, while her findings may offer a solution to the mystery of why malignant brain tumors kill with such speed and purpose. Indeed, it is high time for attention to be paid to the deadly cancer

that begins to attack its victims in their 40s, condemning 20,000 a year to death.

Glutamate role

Dr. Nedergaard had published an earlier (2001) glutamate study in *Nature Medicine*. She and her fellow authors, including Takahiro Takano, a graduate student in the department who served as first author, emphasized that,

ABOVE: In this confocal image of brain tumor cells, the malignant cells are labeled green and spread into the normal tissue by way of the blood vessels (red). Glutamate transporters are shown in purple. Note that the brain tumor cells do not express glutamate transporters, while astrocytes in the surrounding tissue are filled with these transporters.

"Despite significant improvements in the early detection of malignant gliomas, the median survival of patients remains less than 12 months from the time of diagnosis." The scientist, who is a trained clinician, showed how "implanted glutamate-secreting glioma cells trigger neuronal degeneration *in vivo*...The observations support the idea that glutamate secretion by neoplastic glia promotes tumor expansion by enhancing the inflammatory response within tumor surroundings." Her research is funded by a \$200,000 grant entitled "Glutamate Receptor Antagonists and Malignant Gliomas" awarded by The Brain Tumor Society. "This is a private foundation," she informs, "based on contributions from patients or their relatives. They call you every month to see if you've made any progress."

Dr. Nedergaard owes her findings in part to the relatively new 2 Photon Confocal Microscope she recently obtained by a shared equipment grant from the NIH. The microscope uses high-energy light to excite fluorescence molecules and can be used to show different structures and functions of cells. "For example," she says, "you are able to image changes in intracellular ions, intracellular messengers and tumor proteins. This rig enables you to look into tissues...It's a very important leap to move from culture to live intact tissue—for instance, to image the dynamics of tumor infiltration. Now we are able to do that."

Rube Goldberg incarnate

If the expectation is to see a familiar-looking device or a sleekly modern instrument, the 2 Photon Confocal Microscope in question does not fit the bill. It might even be called a contraption. Dr. Nedergaard applied as the principal investigator to the NIH along with 10 other faculty members of the College for a grant to buy the components. The NIH awarded \$500,000, while the College kicked in \$150,000 to improve the space location. "By building it ourselves, we built two systems, giving us more capacity. We can do

much more with it than a commercial model...New York Medical College is one of the first to have this system. We are able to image single cells in live animals and thereby study the basic cell biology of several brain diseases, including brain tumors. By the way, use of the microscope is not restricted to the brain. The technique can just as well

Leonard, Ph.D., associate professor of physiology; and Jian Kang, M.D., Ph.D., associate professor of cell biology and anatomy.

Dr. Nedergaard's own laboratory is unusual in that her team of 18 investigates diverse neuroscience disorders ranging from stroke to spinal cord injury



ABOVE: Neuroscientist Maiken Nedergaard, M.D., Ph.D., has more than \$1.6 million/year in research funding from federal and other sources. She is convinced that several brain disorders have a common basis of cause, which leads her to study conditions as disparate as stroke, brain tumors and spinal cord injuries.

be applied to other organs. In fact, the microscope is presently used in collaboration among several departments," she says.

The handy scientists who deserve the credit for constructing the microscope system are William N. Ross, Ph.D., professor of physiology; Christopher S.

and brain tumors. This is not to say her interests are scattered; rather, her research is so basic it underlies the many disease states she confronts.

Astrocytes abound

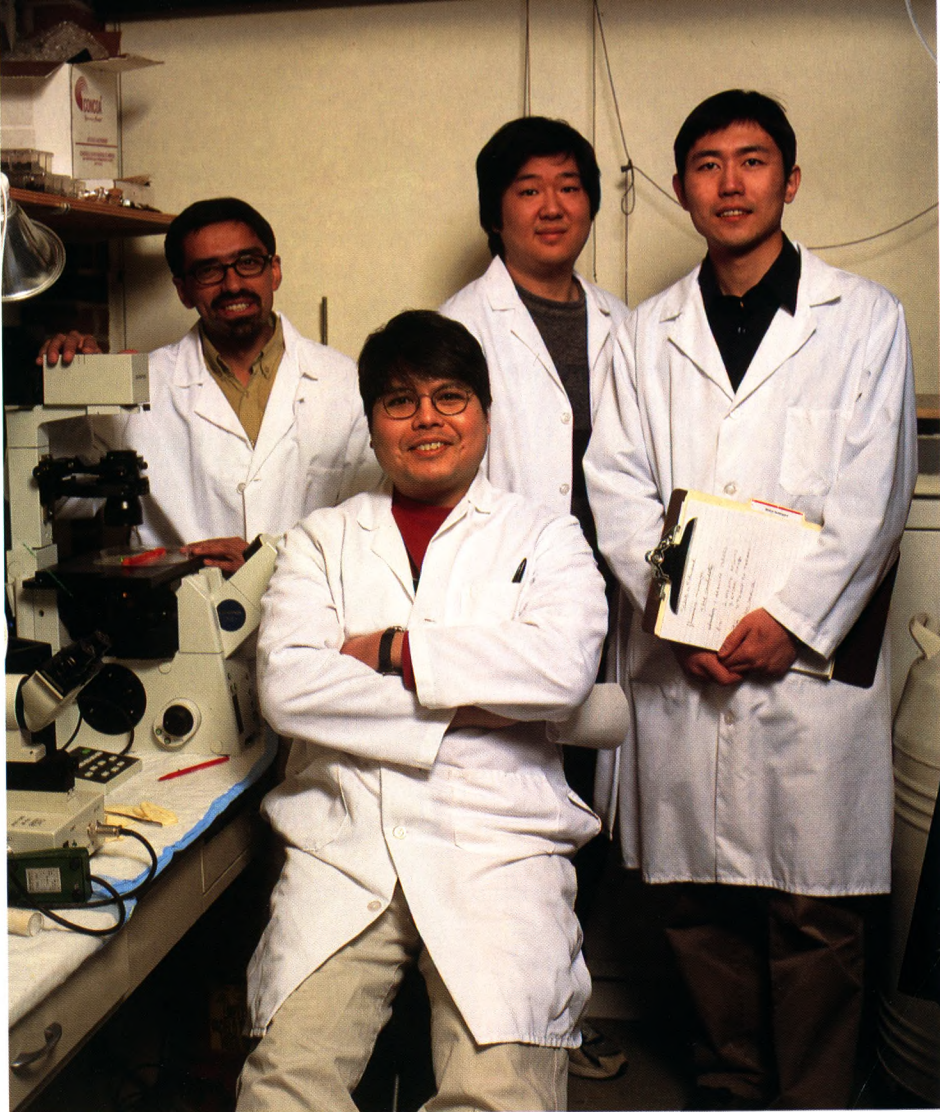
"Astrocytes are support cells that comprise 90 percent of the human brain," Dr. Nedergaard explains. "We look at

how astrocytes participate in all of those disorders—how their malfunctioning may affect the outcome. Actually, astrocytes are supposed to absorb glutamate, and in normal brain tissue, astrocytes will take up glutamate at an impressive speed. But it's just the reverse in brain tumors, which are malignant astrocytes. The glutamate that is released proceeds to kill the surrounding neurons instead of protecting them... Similar mechanisms of astrocytic dysfunction may also explain why dopaminergic cells are killed in Parkinson's disease."

It is generally agreed that glutamate is the major fast excitatory neurotransmitter in the brain, and it is estimated that glutamate mediates 60 percent to 70 percent of all brain activity. In describing its toxic role, Dr. Nedergaard blames malignant gliomas—composed of malignant astrocytes—for releasing the glutamate, which excites the surrounding neurons at the site. These neurons become so hyperactive that 50 percent of patients subsequently develop epilepsy, and eventually the excess glutamate kills the neurons. "We can't stop the cells from releasing glutamate, but by adding a drug that is an antagonist, we can efficiently put a stop to the process," she advises. "In fact there is a drug called Memantine being used in Europe that has very few side effects, but it is not yet FDA approved. It slows the spread and growth of tumors 50 percent by blocking receptors and preventing the cells from binding to glutamate, rendering it ineffectual. The drug is taken by mouth and when combined with chemotherapy, radiation and surgery, becomes a new way to treat tumors without side effects."

Different cancer

Explaining the poor outcomes in treating brain tumors, Dr. Nedergaard mentions that this malignancy behaves quite differently from cancer elsewhere in the body. "A brain tumor will infiltrate the surrounding tissue at a very early stage, making a cure nearly impossible. These tumors can start as just a single



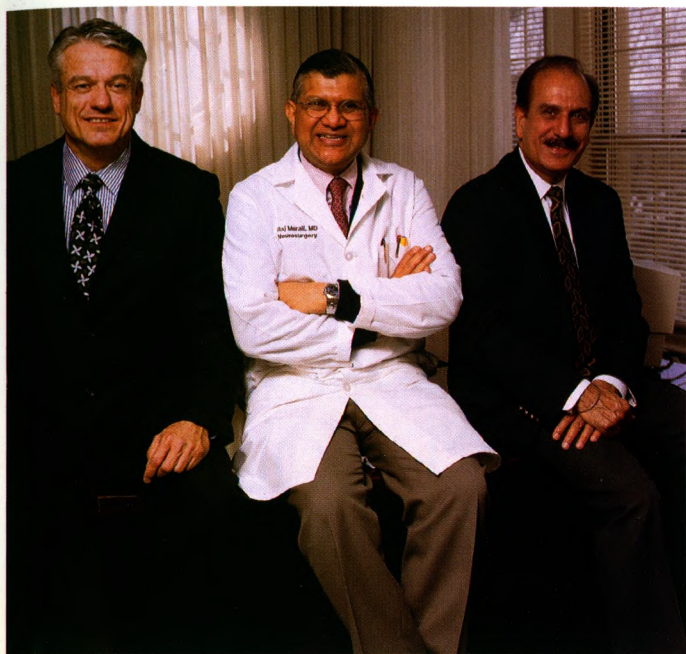
ABOVE: The laboratory of Maiken Nedergaard, M.D., Ph.D., is studying the effects of glutamate, a neurotransmitter released by a brain tumor, which becomes toxic to neurons in the surrounding tissue. Members of her team, all Ph.D. candidates in the Department of Cell Biology and Anatomy, are standing from left, Arnulfo Torres, Gregory Arcuino, Xiaohai Wang and Takahiro Takano, seated.

cell, but it can spread out and infiltrate the entire brain by the time a patient is diagnosed," she advises.

"In the last 10 years there have been 30 clinical trials with thousands of patients. The problem is, the basic science has been done on rats, and when the drug is given in a clinical trial, it fails altogether in humans. I think it happens because human brains are composed mostly of astrocytes; 90 percent of cells in the adult human brain are astrocytes, but in rats the number is lower, less than 50 percent. Now, monkeys have nearly as many astrocytes as humans, and that is why I believe primate experimentation is needed before human trials..."

"Incidentally, there is another aspect of glutamate that is fascinating. In our most recent publication [also a

cover story in *Nature Medicine*, published April 2003], we show that the adult human brain contains a large pool of neural stem cells. That means our brain has the capacity to renew itself. But the problem is that stem cells in the brain will divide only to a minor extent. Only when we take them out of the brain and study them in cultures will they start to multiply. So a central question is, how can we stimulate these neural stem cells to divide and form new brain tissue? Interestingly, glutamate spurs division of neural stem cells and thus act as a growth factor on these primitive cells. If we could manipulate astrocytes to release a controlled amount of glutamate, we should be able to induce neurogenesis in the adult human brain." ■



Three veterans with more than 60 years of collective service at New York Medical College have been appointed department chairmen. The former acting chairmen are from left, Joseph L. Halbach, M.D., M.P.H., Family Medicine; Raj Murali, M.D., Neurosurgery and Brij Singh Ahluwalia, M.D., Neurology.

Joseph L. Halbach, M.D., M.P.H. Dr. Halbach, associate professor of clinical family medicine, who was made acting chairman in 1998, has been director of the family practice residency program at Saint Joseph's Medical Center in Yonkers since 1985. Active in several professional organizations including the New York State Academy of Family Physicians, where he has served on various commissions, Dr. Halbach has developed curriculum and lectured widely on teaching medical students and residents about the prevention and management of medical errors. He received his medical degree from the University of Illinois College of Medicine and com-

pleted his residency in family practice at Montefiore Hospital and Medical Center in the Bronx. Dr. Halbach earned his master's degree in public health from Columbia University School of Public Health in 1991. He joined the College in 1984 as a clinical instructor in the Department of Family Medicine.

Raj Murali, M.D. Dr. Murali, professor of clinical neurosurgery, associate professor of otolaryngology and chairman of the department of neurosurgery at Saint Vincent Catholic Medical Centers-St. Vincent's Hospital Manhattan, has served as acting chairman for the past year. Previously he was associate attending physician at Bellevue Hospital Medical Center, New York University Medical Center, and The New York Eye and Ear Infirmary. A member of many national and international organizations including the American Association of Neurological Surgeons and The Society of Neurological Surgeons, he is also a fellow of the American College of Surgeons, the Royal College of Surgeons in England, Edinburgh, and Canada, and the New York Academy of Medicine. Dr. Murali has authored dozens of journal articles, co-authored a text on trigeminal neuralgia and lectured around the world. He completed his medical training and internships in general surgery, internal medicine, and obstetrics and gynecology at the Government General Hospital in his native Madras, India. Dr. Murali joined the College faculty in 1991 as an adjunct associate professor of neurosurgery. In 1998, *New York* magazine named him one of "The Best Doctors in New York."

Brij Singh Ahluwalia, M.D. Dr. Singh, professor of clinical neurology, has been acting chairman since 2000 and director of neurology at Westchester Medical Center (WMC) since 1986. He served as chief of neurology at Metropolitan Hospital Center in New York City from 1977 to 1986. A fellow of the American Academy of Neurology and of the American Heart Association (AHA) Stroke Council, Dr. Singh is a former president of the Westchester chapter of the AHA, and of the Medical Board of WMC. He received his medical degree in 1966 from Punjab University in Chandigarh, India, where he also earned a post-graduate degree in medicine. He completed residencies in internal medicine and emergency service at Rajindra Hospital in Patiala, India, and a four-year neurology fellowship for the Indian Council of Medical Research, a national health research institute. Dr. Singh completed an internal medicine residency at Beekman-Downtown Hospital in New York City in 1968. In 1972, Dr. Singh joined the Department of Neurology faculty at the College.

2002 Dean's Distinguished RESEARCH AWARD

Michael S. Wolin, Ph.D., professor of physiology, was honored with the 2002 Dean's Distinguished Research Award for his internationally recognized work in demonstrating that oxidative stress plays a major role in the modulation of tissue and vascular reactivity. His lecture entitled, "Oxidant Signaling Mechanisms and the Control of Vascular Function," explored specific oxygen signaling pathways that control dilation and constriction of blood vessels.

Dr. Wolin began his College career in 1983 as an assistant professor of physiology. A Revson Foundation Biomedical Scholar, he received a Ph.D. in chemistry from Yale University and completed an NIH postdoctoral fellowship in the pharmacology department at Tulane University School of Medicine, New Orleans. He became associate professor in 1989, and a full professor in 1995.



Holding three NIH grants, including one MERIT Award, Dr. Wolin is one of only four members at the College to receive this special funding that allows continued research for 10 years without the need for repeated applications. He was the recipient of an American Heart Association Established Investigatorship grant, and currently is chairman of its Council on Cardiopulmonary and Critical Care. An avid writer, reviewer and lecturer, Dr. Wolin is a member of six editorial boards of peer-reviewed journals.

Each year the Dean's Distinguished Research Award is presented to a College faculty

member in recognition of a body of scientific work or specific achievement in science. Nominations are made by faculty, administration and students. ☐



THIS IS YOUR (MEDICAL SCHOOL) LIFE

Three years from now, Kathleen Llewellyn and Brad Hamik will look back at the time they started medical school and... what next? Well, you'll have to stay tuned. CHIRONIAN will follow two first-year students and regularly update their stories until Commencement 2006. The selection of Ms. Llewellyn and Mr. Hamik was made by consensus of three faculty members who know first-years best. Coincidentally, the two chosen have much in common.

After having worked in a hospice in Calcutta, and cared for disabled children and nursing home patients in Jamaica, it seems curious that Kathleen Llewellyn, 23, would choose a medical school relatively near her home in Mineola, on western Long Island. It certainly wasn't a reaction to the service projects of Global Outreach, where she had applied in her sophomore year at Fordham University in the Bronx. Kathleen still intends to work in hospices abroad, she says, because "I think that's where the greatest need is for medical care. Not many doctors are interested in working with the dying." Perhaps a quick acceptance and the partial schol-

arship she received had something to do with it, although she claims she "liked the environment here better than other schools where I was accepted. It seemed very comfortable and relaxed."

That she made a wise choice is evident as she praises "my fellow students, who are very open. This is not a competitive environment. I am also lucky enough to live with three great roommates." As for the faculty, "most of the teachers are as good as I expected," she says. "They can only go so far in what they do... It's harder than I thought, but I'm getting used to the less organized and lecture-oriented structure. One thing I really like is how the professors treat

everyone equally. It's something I've always been attuned to and I'm proud to be in the first class where women are in the majority."

With a B.S. in biology, her science interest was never in question. "Since my second year in college [when she was among only 11 students chosen by the outreach organization], I had worked long hours in the laboratory," Kathleen says. "It was interesting but boring. The service projects provided me with inpatient experience and then some—AIDS, TB, leprosy and all kinds of infectious diseases. Part of the outreach experience also included working with nutrition counselors at Bronx AIDS Services. I still have a wide range of interests, but from past experience I'm strongly considering primary care, and am also looking into surgery and psychiatry."

In reacting to being selected as CHIRONIAN's subject for this story, Kathleen confirms the unassuming personality so evident during the interview. "I really am surprised to be picked," she says aside. "I didn't think I had made any impression on the teachers at all."



✦ Kathleen Llewellyn

Brad Hamik, 25, waited two years after graduation from the University of Nebraska in Lincoln before receiving acceptance into medical school. Born in the town of O'Neil, Neb., the cornhusker moved to Hawarden, Iowa, growing up in a family where science was a desirable career. His mother is a hospital x-ray technician, his brother is working on a Ph.D. in physical chemistry at Florida State University, and his sister pursues a nursing degree at College of St. Mary's in Omaha. Brad received a B.S. in biochemistry



Brad Hamik

from Nebraska along with the glory of having played on the varsity football team from 1996 to 2000 as a defensive back. The extended layover was not without merit. "In the first year, I was an aide in a nursing home. I helped a group of physicians who were opening up clinics in Ecuador with Medical Missions International. I was a medical technician in a hospital that let me do everything. I also performed a phlebotomy while working for Quest Diagnostics," he says. And he marked his spare time by counseling Latino kids at summer camp and waiting tables in a Lincoln restaurant.

Year number two began with breast cancer research at the Eppley Cancer Institute, associated with the University of Nebraska Medical School. His disappointment in not being accepted there spills over as he says, "I really wanted to be accepted right away, but I learned a lot from my time out of school. I've been really happy lately, except there is too much snow. After working for two years in the nether world, it's nice being back in the real world..."

"What I like here especially are the professors. They are really good and personable and they seem to care about our general well-being and making sure we're learning what we're supposed to. It's nice that they seem to have a personal interest."

Although he is not now interested in an M.P.H. degree, he thinks he will focus on minorities and international health. "In our town of 3,000 there were a great many from Mexico and Guatemala who came to work in the meatpacking plants. So I'm leaning toward a field that will allow me to travel and work with the underserved," he says. ☒

— Ed. note: *Chironian* wishes to thank Anna Drakontides, Ph.D., for suggesting this story.

Public Health Alum Plays Mother Hen

for Residents as They Learn
Their Specialties and Become
Medical Professionals

Ellen M. Kinsler, M.P.H. '88, oversees
residency programs at three hospitals run by
Medisys Health Network.

It is not the best of times for hospitals or for any healthcare provider on the receiving end of public and private reimbursements. In the government sector, legislators cut back on appropriations to conserve funds; private employers chop the costs of providing health benefits using every legal (and sometimes not) means to accomplish the same thing. It is in this environment that Ellen Marie Kinsler, M.P.H. '88, works as director of academic affairs for Medisys Health Network, where she looks after some 500 residents and 100

medical students at the company's affiliated medical schools: Weill Medical College (Cornell), Albert Einstein College of Medicine, St. George's University School of Medicine on the island of Grenada and SUNY Health Sciences Center in Brooklyn. With the percentage of patients using HMO care continuing to rise and doctor's salaries headed in the opposite direction, Kinsler stays aloof from the controversy and keeps the flag flying. "I'm concerned with the totality of the educational experience," she says with pride. So

despite a climate rife with threatened strikes and complaints of inadequate reimbursement, she goes about her business of ensuring that medical school programs underway at her affiliates continue to receive the imprimatur of the Supreme Court of medical education—the Accreditation Council of Graduate Medical Education (ACGME).

Rotates herself

It is a formidable task. By the end of each week, Kinsler has visited all three hospitals where her resi-

dents dwell and medical students rotate: Jamaica Hospital Medical Center and Flushing Hospital Medical Center in Queens, and Brookdale University Hospital and Medical Center in Brooklyn. It is a usually a physician who does her job, though she is quick to claim she is not alone. "There are many non-physicians with education backgrounds who are in charge now," she says. "I think my whole life I've been doing this...I have a teaching certificate but I've never taught, and everyone in my mother's family is in education—elementary, high school and college." However, it was at New York Medical College that Ellen Kinsler got on-the-job training in how to run an educational program. Along the way she established the Office of Graduate Medical Education with oversight for 75 residency programs sponsored at 8 hospitals.

Kinsler had first come to Valhalla as a student, earning an M.P.H. in health policy and management in 1988. A decade later she tacked on a certificate in managed care. Her career at the College had begun in 1980, when Kinsler signed on as a secretary in the offices of radiation safety and nuclear medicine. She stayed for seven years, moving on to become assistant to the dean of the School of Medicine. This is where Kinsler got her first taste of educational oversight—when she organized the Liaison Committee on Medical Education site visit that handed the School of Medicine six years of accreditation. "Eventually, Dr. [Karl P.] Adler asked me to start the GME office," she says. "There were lots of residency programs, but no overall office for administration." One year later she was appointed assistant director for



ABOVE: Ellen Kinsler learned her trade by establishing the Graduate Medical Education office at New York Medical College. Her fond memories of that time have left her with a soft spot in her heart for medical residents and for the university.

graduate medical education/affiliations and the GME office was on its way. So was the resulting Medical Education Consortium consisting of the CEOs of eight affiliated hospitals then known as Westchester County Medical Center, Metropolitan Hospital, St. Vincent's (Manhattan) Hospital, Lincoln Medical and Mental Health Center, Our Lady of Mercy, Stamford Hospital, New Rochelle Hospital and St. Vincent's Staten Island.

Moves south

"In 1990 it was time to move on," says Kinsler, who went to work for the medical director at Lincoln. Soon she was promoted to assistant dean for medical education there, with responsibility for 26 residency programs comprising 270 residents and 175 students doing medical school rotations. But the seven-year stint came to an abrupt end when the City of New York failed to renew the affiliation contract between Lincoln and the College. "I could have gone on to Met, but I wanted a change,"

says Kinsler, who accepted an offer from an orthopedic surgeon at Bronx-Lebanon Hospital to administer the department residency program. "It was a nice change for me," she recalls. "I even got to go into the OR now and then."

But other changes wrought by managed care made for some unpleasant circumstances at Bronx-Lebanon and Kinsler decided to leave. In July 2000 she joined Medisys, where she plays the role of mother hen as well as GME guru to her charges. "It is my responsibility to see them paid, to get them benefits, to make grievance procedures available, to negotiate contracts with the union, to do strategic planning with the top management of the hospitals, and to suffer the

recent budget cuts," she advises. "The federal government recently reduced the amount of GME reimbursement—the money the hospital gets back on each resident, based on the number of residents it has."

Soft spot

Nevertheless, Kinsler has clearly found her niche and made the most of it. "I do love the job," she admits. "I feel like I've had something to do with turning out a professional who is well trained and qualified and excited about going into medicine. It's wonderful to see them excited about the learning process." Though she insists she has no plans for greener pastures, Kinsler does offer a carrot: "I enjoyed my time at the College. If anyone decided to ask me to come aboard, I would consider it."

As for her alma mater, Kinsler crows, "The program has really improved and I am so proud they are going for accreditation as a school of public health. It will be very good for recruitment." ■

Physiology Alum Finds Great Science and Football in the Steppes of Midwestern America

New York expatriate Irving Zucker, Ph.D. '72, runs a basic science department at the University of Nebraska.

Irving Zucker told his wife the post-doctoral fellowship would only be for two years, so she agreed. Thirty-one years later, Dr. Zucker is still in Omaha and that fellowship has developed into the chairmanship of the Department of Physiology and Biophysics at the University of Nebraska College of Medicine. But Irving H. Zucker, Ph.D. '72, visits his alma mater from time to time, most recently when he addressed the dinner crowd gathered to honor Gabor Kaley, Ph.D., professor and chairman of the Department of Physiology, last year.

"I knew Gabe was doing work that was related to the renin angiotensin sys-

tem in the kidney, and I also wanted to get back to New York," explains Dr. Zucker as to how he wound up in Valhalla after getting his master's degree in biology from the University of Missouri at Kansas City and a B.S. in biology from The City College of New York. "The fact is that my education at New York Medical College was outstanding. My professors—there aren't too many left—were very conscientious about getting graduate students who could compete ... I learned how to write papers and grant applications, which are most important for a research scientist, and how to speak in front of an audience."

Omaha stakes

And so in his fourth year of a Program Project Grant for \$1 million, the sixteenth year of his own RO1 grant, both from the NIH, and with another \$100,000 from a small drug company, Dr. Zucker continues to investigate the mechanisms in the brain that turn on the sympathetic nervous system in heart failure. However, this is not to say he no longer misses New York because he says he does.

"When I was finishing up my Ph.D., I became interested in the regulation of blood volume, and among the papers I read were several by Joseph Gilmore

[Ph.D., then at the University of Virginia School of Medicine],” Dr. Zucker explains. “He offered me a fellowship—but then informed me he had just accepted a position at Nebraska as chairman. I looked at a map and thought, only for two years. My wife and I trekked across the country in the freezing cold. That was in 1972.”

Sometimes life’s greatest struggles are the ones we remember best. Dr. Zucker published several papers during his first year at Nebraska, even though “I had to beg, borrow and steal the proper equipment.” His first manuscript was accepted in *Circulation Research* in 1973. Since then he has published an estimated 150 papers, review articles, book chapters and an equal number of abstracts, serves on the editorial boards of nine journals and participates on the Cardiovascular and Renal Study Section of the NIH.

After about 18 months in his post-doc at Nebraska, he was eager to take on a faculty position. Loyola in Chicago offered him a slot as assistant professor, but in the end he accepted a job that paid \$1,000 more—at Nebraska. “It wasn’t the money,” he insists. “I stayed on so as not to interrupt the work in progress with Joe Gilmore.”

This is your life

From there he was on track. From assistant professor of physiology and biophysics in 1973, he moved to associate professor in 1976, receiving tenure in 1980. Three years later he was made full professor. When Gilmore decided to step down in 1987, a national search ended with Dr. Zucker being offered the job. “Over the years I had considered many other posts, but nothing had ever panned out or been good enough to lure me away ... I never really got used to Nebraska. I always missed my family, the culture and the ambience of the New York area. No one from there ever moves out here—they don’t even visit!” he jokes. “But my kids feel this is their life here.” He is referring to his three girls, one with a master’s degree in business administration, the second a special ed teacher and the third a producer for a local television station. “And there’s always the football,” he

adds. Dr. Zucker has season tickets to the Nebraska Cornhuskers, and looks forward to the games with gusto. “It’s fun—and infectious,” he says.

More to the point, he found that when Gilmore retired, a number of longstanding people decided to leave, too. That left a wide open field for Dr. Zucker to begin recruiting the kind of department he wanted to run. “[Success] depends on the vision the chairman has and what the faculty does,” he says. “I decided to focus the department on renal and cardiovascular issues.” The first person he hired, an electrophysiologist, “tries to understand how the whole heart generates arrhythmias by looking at cells.” Now he has four people in the department—which totals twelve—doing patch clamp work on different tissues.

His program project grant, “Neurocirculatory Function in Heart Failure,” seeks to understand the brain mechanisms that activate the sympathetic nervous system during heart failure. Chronic heart failure affects approximately 500,000 Americans per year and the syndrome is growing as the population ages. Sympathoexcitation is a major contributor to the downward progression of the disease. Sympathetic nerve activity originates in specific sites in the brain where activity is modulated by both local and circulating hormones. Dr. Zucker focuses on angiotensin II and the effect of nitric oxide on sympathetic outflow and the regulation of blood pressure and blood flow using gene manipulation techniques applied to intact animals. His strategy is to avert some of the damage caused by the sympathetic nervous system by

manipulation of several hormones that act in the brain.

“The goal is to intervene at the source, where nerve activity gets turned on in the first place—at the brain stem,” he says. He is conducting tests on a variety of species and has been consulting with a firm that plans to develop a device in preparation for clinical trials. He sees four levels of investigation: whole animal, organ, cellular and molecular. “We are working at all four levels, but we can’t waste any time,” Irv Zucker says.



Irving H. Zucker, Ph.D. '72, directs a team of researchers in understanding the actions of the sympathetic nervous system during heart failure. He chairs the Department of Physiology and Biophysics at the University of Nebraska.

Though he can foresee a time when sympathetic nerve activity can be better controlled during heart failure, he adds a caveat: “It will take a lot of hard work and dedication to accomplish this in my lifetime.” ■

— Donna E. Moriarty

Orthopaedic Surgeon Sees the World, Then Launches Career in His Own Back Yard

John E. Mullen, M.D. '93, has joined a private practice in New Milford, Conn., the town where he grew up.

Some guys have all the luck and even John E. Mullen, M.D. '93, admits he is one of them. After his residency at the prestigious Hospital for Special Surgery (HSS) in New York City in June 2002, he took July off and then started his job as the seventh surgeon in the New Milford Orthopedic Associates P.C. group. New Milford, Conn., by the way, is where Dr. Mullen grew up and graduated high school in 1985.

By all accounts Dr. Mullen has done well. In addition to his medical prac-

tice he serves as house physician at Madison Square Garden, covering the Knicks and Rangers. One of the partners in his practice, Andrew Bazos, M.D., was the medical director at the Garden and at Yankee Stadium. He has asked Dr. Mullen to pinch hit for him at both venues. "I get parking and the best seats for the games and concerts—anything in the arena," Dr. Mullen said. "I'd do it even if I didn't get paid. My wife Karen loves it. We spend a lot on babysitters."

It seems most everything has come easily for Dr. Mullen. He arrived at

New York Medical College with a bachelor's degree in biology from Providence College in Rhode Island. He paid for his first year of medical school himself; the U.S. Navy picked up the tab for the remaining years in exchange for three years of service—part of an Armed Forces Health Professional Scholarship. During a one-month elective in his fourth year at Queen Mary Hospital in Hong Kong, he decided that orthopaedic surgery would constitute his future and kept his sights steadily on the prize.

Combat doc

Active duty for Dr. Mullen began in July 1994 after a transitional year at St. Vincent's Medical Center in Bridgeport, Conn. He served as battalion surgeon for 1,000 Marines in the Second Marine Division at Camp Lejeune, North Carolina. "The job title is battalion surgeon," Dr. Mullen explains, "but it's really medicine." He was there only a month before shipping out to Haiti for "Operation Restore Democracy," a three-month assignment guarding the health of Marines sent to depose the military dictator. Then it was back to Camp Lejeune until January 1996 and a six-month deployment to the Mediterranean on the USS Guam, a large amphibious support ship with 2,000 Marines on board. He spent his last, relatively uneventful year in the Navy back in North Carolina, where he also worked as an emergency room physician with Coastal Physicians in Durham. His tour of duty earned him a Commendation Medal and a Combat Action Ribbon for Service in Liberia.

Dr. Mullen headed to Cleveland and Mount Sinai Medical Center for one year as a general surgery intern, followed by a second as an orthopaedic surgery resident. The one blip in an otherwise smooth-sailing career path occurred when the residency program closed and he was forced to apply elsewhere. But in the Mullen style he landed on his feet—in full stride, so to speak—at the Hospital for Special Surgery on Manhattan's Upper East Side.

Designated hitter

During the HSS stint he began working with David Altcheck, M.D., team physician for the New York Mets. "A resident always went to the game to cover the stadium. I went eight times, including that heartbreaking fourth game of the World Series when the Yankees beat us," reminisces Dr. Mullen, a long-suffering Mets fan. Back at HSS, Dr. Mullen eventually met up with College alumni Leon Root, M.D. '55, a pediatric orthopaedic surgeon, and Douglas Padgett, M.D. '82, who specializes in adult reconstruction of hips and knees.



ABOVE: Good fortune continues to smile on John E. Mullen, M.D. '93, placing him in the stands at Yankee Stadium and at Madison Square Garden where he occasionally pinch hits for the teams' medical director.

After so much globetrotting, one might wonder about the move back to New Milford. "I always thought about coming back home to this area," Dr. Mullen reveals. "My parents are here. My dad's still a practicing dentist in New Milford and my mother was a nurse at New Milford Hospital. And as it happened, one of the foot and ankle surgeons at HSS, Martin O'Malley, M.D., is affiliated with New Milford Orthopedic Associates. He called the group and promoted me."

Dr. Mullen wants it known that he remains very close with classmates Mark Medici, M.D. '93, an orthopaedist in Rockland County; John Lewis, M.D. '93, an internist in Boston; and

Matthew Loughlin, M.D. '93, a urologist in Florida. "I was very happy at New York Medical College," Dr. Mullen says. "They prepared me well to be a doctor. I met wonderful people and had a great student experience. And my clinical experience at all the New York City hospitals was great."

The best may be yet to come. Dr. Mullen, who specializes in trauma, arthroscopy and joint replacement (mostly hip), is an associate in the practice now, but in two years he expects to become a partner. "I've always felt I have led a charmed life," he says. Indeed, it appears he has. ☘

— Susan Hoffner



MESSAGE FROM THE DEAN

(continued from page 4)

examination, but also communications and the behavioral, cultural and socioeconomic aspects of medicine. For example, the teaching and modeling of professionalism for medical students has been strengthened. There are strong relationships with the teaching hospital affiliates; more than 300 third- and fourth-year medical students are doing clinical clerkships or electives off campus at any given time. Indeed, it is a major educational undertaking to administer clerkships in multiple hospitals during the clinical years, and to make sure all students are receiving standardized grading and a uniform educational experience.

The College has developed student outcome measures and continually evaluates the curriculum. Outcome measures include performance on the national USMLE board examinations, National Resident Matching Program results, the graduation questionnaire of the Association of American Medical Colleges, and an annual survey of residency program directors conducted by the School of Medicine. Based on these criteria, our graduates are well prepared to advance along the continuum of medical education. Students are scoring higher on the boards than the national averages, the responses of graduates on the commencement questionnaire are positive, and program directors report that our students are well experienced to begin their residencies.

This May 193 students, 5 also with M.P.H. degrees, were awarded their M.D. degrees in Carnegie Hall. By any objective measure, the School of Medicine is flourishing academically. This success is due to a dedicated faculty and administration, strong teaching affiliates, increasing student financial aid and the new Medical Education Center facilities. However, nothing is static in medical education. There are a number of challenges facing us over the next few years. We must continue to attract highly qualified applicants with the personal qualities to become dedicated, compassionate and ethical physicians. Our \$32,000 tuition is high; the average student graduated with \$147,000 in debt last year and interest continues to accumulate during residency. We are concerned that this may deter qualified candidates from selecting New York Medical College. Our ability to provide scholarships has grown, but we have a long way to go to be competitive with other medical schools. The financial pressures on our hospitals and clinical faculty are of growing concern and could threaten the time and resources needed to provide clinical education. One of our development priorities is establishing endowed chairs and professorships. The curriculum must be constantly reviewed and revised to accommodate the rapidly advancing knowledge in biomedicine, while continuing to emphasize clinical skills, humanism and professional development of the student. At the same time new informatics and educational technology have to be appropriately incorporated into medical education.

These are exciting challenges and we look forward to meeting every one of them. ☒

MOVEMENT DISORDERS SHIFT TO THE FRONT BURNER

(continued from page 15)

the operation. This task belongs to Rhea Dornbush, Ph.D., M.P.H., professor of psychiatry and neurology, a longtime member of the College faculty. The results are used to rule out severe dementia unrelated to the Parkinson's disease. Patients with significant dementia should not undergo the surgery, as studies have shown a lower likelihood of benefit and a higher possibility of worsening dementia following the procedure.

Ever the optimist, Dr. Mogilner advises, "I think the future of clinical neuroscience is neuromodulation. We can treat a variety of diseases by modifying the circuitry in the nervous system through electrical stimulation, perhaps gene therapy and even transplantation." He uttered these words months before the publication of two significant pieces of Parkinson's research:

Faculty members of the Department of Neurology at The University of Medicine and Dentistry of New Jersey—Robert Wood Johnson Medical School identified a small region on chromosome 4 as the site of a gene mutation responsible for the disease in 60 members of a large multi-national family (*Science* November 15, 2002). The recently retired chairman of that department is Roger Duvoisin, M.D. '54, who spent most of his career studying the roles of heredity and environment in Parkinson's disease.

Cell biologists at the University of Wisconsin found that injecting the human hormone GDNF restored vigor to remaining neurons in the brains of five Parkinson's patients (*Nature Medicine* online March 31, 2003). The hormone was delivered through a hair-thin tube by a battery-operated pump implanted in the abdomen, up the body into the putamen, a region near the base of the brain. (Previous efforts that targeted the ventricles at the center of the brain had been unsuccessful.) After a year of treatment there was an average 40 percent improvement in the patients' symptoms with no serious side effects. ☒

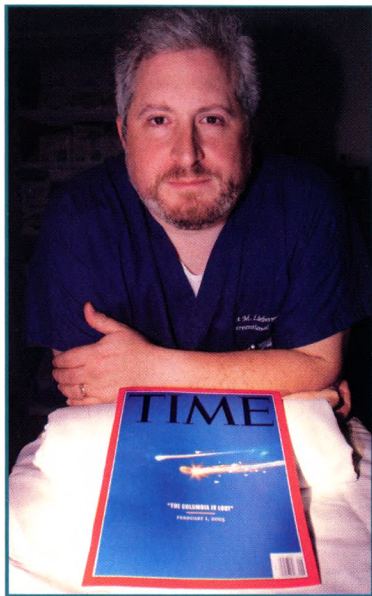
Cardiologist Captures Final Moments of the Columbia

SCOTT LIEBERMAN, M.D. '87

All morning television stations showed footage of the shuttle Columbia, breaking apart in its doomed descent to Earth. They marveled at how an amateur photographer managed to capture the plummeting spacecraft on tape, much less have a camera in hand exactly at the moment it appeared over his backyard in Tyler, Texas. But the photographer, Scott Lieberman, M.D. '87, had planned to be there all along.

A space aficionado who goes to space camp with his daughter, Dr. Lieberman had been tracking the spacecraft on the NASA web site. The site allows people to track all the satellites in Earth's orbit and usually posts a spacecraft's route 26 to 34 hours before it lands, he explained. Dr. Lieberman has been tracking satellites and spacecraft ever since learning that they fly over Tyler—where he moved from New York nine years ago—on their way back to NASA in Cape Canaveral, Fla. "Most flights typically come over here 12 to 14 minutes before touchdown," he said.

On call and in scrubs at the time, the interventional cardiologist knew that Columbia was on its way home. He also knew that it would cross the horizon from west to east in 90 seconds, giving him just enough time to turn on the television and see it land. Expecting an 8 a.m. (central time) landing, he and his wife, Robyn, positioned themselves in their yard with binoculars, a video recorder



Scott Lieberman, M.D. '87

and a digital camera with a telephoto lens.

As Columbia came over the horizon he handed the video camera to his wife and started snapping pictures. "She said, 'Is it supposed to look like it's falling apart like that?'" he recalled. "She could see the parts coming off. I saw some sparking but I didn't think anything was particularly wrong. I just figured the sun was shining very brightly on it." Four-and-a-half minutes later they heard an enormous explosion, instead of the characteristic sonic boom that re-entering spacecraft emit. Alarmed, Dr. Lieberman looked closely at the images he had captured. "The spacecraft was disintegrating before my eyes," he said.

A former high school and college newspaper editor,

Dr. Lieberman instinctively contacted the media. He brought his videotape to the local television station and national networks picked it up from there. He also brought his digital images to the *Tyler Courier Times Telegraph*, which gave them to the *Associated Press* so they could be distributed worldwide. Dr. Lieberman declined lucrative offers from various publications for his photos. He wanted newspaper distribution, so as many people as possible could see them. "I knew these were newsworthy images the world had to see," he said. A few hours later, the photographs were on newspaper front pages and television screens worldwide, plus the cover of *Time* magazine.

Soon television news crews including "Inside Edition" and "The CBS Morning News" arrived in Tyler to interview him. His old high school principal called, along with doctors from Lenox Hill Hospital in Manhattan, where he did his residency. A former astronomy professor sent him an email. "Everybody with a second degree connection called," he said.

The Columbia would have been at least the third shuttle he expected to see land, said the physician, who once considered a career in aerospace medicine. "I've had the application in my hand a few times. But most people who enter the field don't end up flying," he said. "That, and the dangers of space travel, convinced me to stay in clinical medicine. After all, I still like being a cardiologist." ♦



Dr. Scott Lieberman's picture of the Columbia breaking apart on its descent to Earth appeared in newspapers and magazines worldwide.

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Caring For The HARD-TO-REACH

BARBARA ROTH, M.D. '75

Barbara Roth, M.D. '75, always figured she would be a big-city specialist. She liked the cultured life big cities offered. And to be professionally competitive she knew she had to specialize. So how did this "little Jewish girl from Jersey City," her very words, end up practicing general medicine in the Appalachian Mountains?

"I didn't picture myself as a little country girl," said Dr. Roth, sounding a little surprised even after 12 years of living and working in the Appalachian region of Southeast Ohio. "I saw myself as someone who would stay in New York City for the rest of my life." But everything changed when her experience of practicing medicine in the city defied her reason for becoming a doctor in the first place: to make a difference in people's lives.

Dr. Roth came to realize she had found in Ohio what she had been looking for in New York—patients who needed what she had to offer.

"I was feeling like I wasn't accomplishing much," Dr. Roth said of her years as a resident in internal medicine and ob/gyn. Many patients she saw were drug or alcohol addicted or dying of cancer, which left her feeling frustrated and deeply dissatisfied. Plus, the number of patients she had to see in a day made it impossible to give quality attention to each one, she

added. "In a city you're often forced by sheer volume, time and rent pressure to not have enough time to spend with patients. But you can't treat the numbers without worrying about the patients behind the numbers," she said. In the Appalachian Mountains, she



Barbara Roth, M.D. '75

gets to spend all the time she wants.

Dr. Roth, who opted to practice general medicine, decided to follow a romantic relationship to the Midwest and accepted a job at a small clinic in Caldwell. "I thought I was close to the ends of the Earth," she said, remembering her arrival in the tiny, rural town she called "exit 25 on Route 77." Although the romance ended, Dr. Roth came to realize she had found what she had been looking for in New York—patients who needed what she had to offer. Not only did they need treatment for routine conditions such as asthma, hypertension and diabetes, but also help with depression, anxiety and fatigue, which Dr. Roth found to be symptoms of the deeper ills of under-employment, poverty, domestic violence and isolation.

"A lot of these people are coal miners and the mines have been closing," Dr. Roth explained. From under-employment she traced a cascade of hardship. She saw anxiety, depression and fatigue, battered wives and isolated elderly. She also saw "more cancer than there should be, a lot of smoking, obesity and illnesses related to air and water pollution. I believe there's a huge mind-body connection," Dr. Roth said. Her charge was clear: to treat the immediate physical symptoms and, more important, to help her patients understand and address the problems that were contributing to their poor health.

Married to a physician, Dr. Roth is currently practicing in the nearby town of Byesville. She teaches her patients about diet and the dangers of smoking and encourages them to exercise. She guides some into professional counseling. She also encourages battered women to leave abusive partners and urges depressed and lonely seniors to visit family and friends. Most important, she listens to patients whose most immediate need is to talk. "People here don't typically come in saying, 'I'm depressed,'" Dr. Roth said. "You have to tease out the complaint. You listen to the back pain, the stomach pain. Sometimes it's just listening and pointing out what's actually bothering them."

Occasionally Dr. Roth goes back to New York City to visit family and friends, but she has no interest in returning for good. "I like me better now," she said. "I think what I do is very important for the 25 patients or so I see a day. I think I make a difference in their lives." ♦

New York Medical College Hosts Alumni Regional Dinners

New York Medical College hosted a series of regional dinners this year, giving alumni opportunities to renew old friendships, make new friends, reminisce about their medical school days and learn about developments in the School of Medicine. Since November dinners have been held in Las Vegas, San Francisco, Palm Beach, Boca Raton, Miami and Fort Lauderdale. Rev. Msgr. Harry C. Barrett, D.Min. M.P.H., president and chief executive officer, and Louis E. Fierro, M.D. '60, Alumni Association president, attended the get-togethers and delivered information and updates about the College.



Husband and wife, Dr. Jose Iglesias and Penny Tenzer, M.D. '82, enjoyed the regional dinner in Ft. Lauderdale.



David H. Herschthal, M.D. '76 and Lloyd Bergner, M.D. '53, chatted together in Ft. Lauderdale.



Dr. Martin B. Raskin and his wife, Gladys Raskin, M.D. '46, were all smiles in Boca Raton.



From left: Carmen Bissell, Edward Schaffer, M.D. '48, Mary Jo Schaffer and William Bissell, M.D. '48, renewed their friendships in Palm Beach.



Harriet Bloch and Edward J. Bloch, M.D. '69, saw old acquaintances in Boca Raton.

Alumni Association Dedicates 20th Winter Seminar to **JOHN D. O'BRIEN, M.D. '60**

In the summer of 1983, when Joseph F. Dursi, M.D. '59, was president of the Alumni Association of the School of Medicine, his old and dear friend John D. O'Brien, M.D. '60, suggested holding a winter continuing medical education seminar in the Caribbean. Dr. Dursi asked a small committee to explore the idea, which was immediately accepted. In January the Alumni Association celebrated the 20th year of its winter seminar, with gratitude to the man who started it all: Dr. O'Brien. "In recognition of his ingenious idea, I have taken the liberty of dedicating this 20th anniversary seminar in his honor," said Dr. Dursi, chairman of special events for the Alumni Association.

Alumni from around the country reunited at the Embassy Suites Hotel

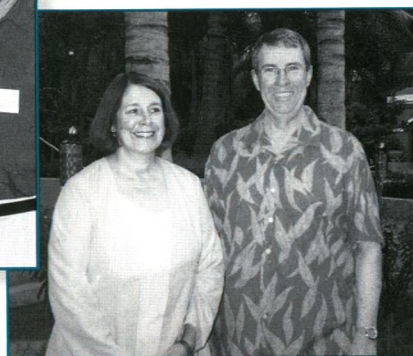


Members of the O'Brien family at the opening cocktail party are, from left: James O'Brien, David O'Brien, M.D. '90, and his fiancée, Julie Vargo, Mary Louise O'Brien and her husband, the honoree, John O'Brien, M.D. '60, and Michael J. O'Brien, M.D.



Enjoying one of many lectures are, from left: Rev. Msgr. Harry C. Barrett, D.Min., M.P.H., Stuart DuBoff, M.D. '69, Richard J. Macchia, M.D. '69, Nicholas F. LaRusso, M.D. '69, and Ralph A. O'Connell, M.D.

Dorado del Mar Beach and Resort in Dorado, Puerto Rico, for the seminar, "New Approaches in the Management of Current Medical-Surgical Issues."



Under the shade of the palms are Jane McGroarty and James F. McGroarty, M.D. '68.

According to Dr. Dursi, the yearly event provides alumni with an interesting CME program, brings old friends and colleagues back together and gives the Alumni Association a chance to showcase members who have "achieved the pinnacle in medicine." Dr. Dursi, who has organized and managed the seminar since its inception in 1983, said he received invaluable help this year from Nicholas F. LaRusso, M.D. '69, chairman of the department of internal medicine at Mayo Medical School in Rochester, Minn. ♦



Old friends reunited at the conference, including, from left: Anthony J. Policastro, M.D., Stuart DuBoff, M.D. '69, Kathryn E. McGoldrick, M.D., and Jane N. Maher, M.D. '67.

CME in Puerto Rico

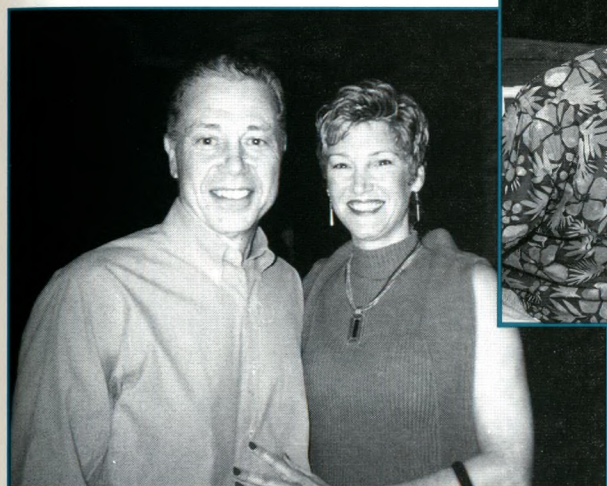
PHOTOS BY MARK SMESTAD PHOTOGRAPHY.



Mario Tagliagambe, Jr., M.D. '84, and his wife, Margaret.



James B. Leach Jr., M.D. '56, and his wife, Evelyn.



Nicholas F. LaRusso, M.D. '69, chairman of the department of internal medicine at Mayo Medical School, and Lee Sabry.



Relaxing at the end of the day, from left: Louise Januzzi, James L. Januzzi, M.D. '66, Jane Hamlin and Paul A. Hamlin, M.D. '67.



Rebecca Fierro and Philip C. Cea, M.D. '70.

Wanting Every Minute of Living To Count

PATRICIA TENNELL, M.P.H. '90

Patricia Tennell, M.P.H. '90, has spent most of her career watching the end of life at Calvary Hospital in the Bronx.



Patricia Tennell, M.P.H. '90

She has seen it in patients with terminal cancer and in their caregivers. She has seen it in healthy elderly who spend their days in despair of death, and in people with life-threatening illnesses that could have been prevented. She also has seen how the quality at the end of life derives, at least in part, from the quality that goes into living, which is why she wants people to live every minute of their lives as fully as they can.

"People are living longer but they're not able to take care of themselves," says Tennell, vice president of patient care services in charge of nursing at Calvary, the world's only acute care hospital for adult advanced cancer patients. "I see so many people who are debilitated that by the time they reach retirement age they can't enjoy life."

Tennell has been a nurse at Calvary for nearly 30 years. She is particularly concerned about the quality of life for older adults, who comprise a growing proportion of the U.S.

population. While some have the support of friends and family or can afford to move into assisted-living communities, others must face old age alone. In response, they can become reclusive or depressed. They also may lose sight of the need for exercise and good nutrition, inadvertently complicating age-related conditions such as arthritis, hypertension and diabetes, reducing their already limited physical abilities, Tennell says.

Older adults may become so fixated on their ailments and limitations that they gradually shape their lives around doctor visits and medication regimens. Convinced that their lives are over, they may precipitate their own decline.

"Why shouldn't people have a good quality of life in their senior years?" Tennell asks.

Nationally-sponsored programs designed to teach good nutrition, health and fitness could significantly improve their quality of life, she says. Even informal, community-sponsored efforts to provide seniors with safe places to take daily walks could make a positive difference in their lives, she suggests.

Older adults, however, are just one population whose quality of life Tennell worries about. Adults at mid-life, especially perimenopausal women, unknowingly compromise their quality of life every time they go without preventive health screens that can detect certain cancers or other potentially fatal illnesses in time for early and effective treatment,

M I L E S T O N E S

Two Thousand

Alex E. Fijman, M.D. '00, is completing a residency in internal medicine at Stony Brook University Hospital in Stony Brook, N.Y. and will remain there to begin a fellowship in pulmonary/critical care in July.

Mohammed A.R. Khan, M.D. '00, is a practicing oral and maxillofacial surgeon in Butler, Pa., outside Pittsburgh. Dr. Khan lives with his wife Afshan and their three children: Noor, Kabir and Basir.

The Nineties

Barry J. Lifson, M.D. '90, has joined Urology Associates in Vienna, W.Va.

Elaine M.K. Schwartz, M.D. '90, and her husband Michael Schwartz became the proud parents of triplet boys, Benjamin, Jaden and Shiloh, on August 1, 2002. They join their sister Talia. Dr. Schwartz has returned to work as the senior partner of Pulmonary and Critical Care of Northern Colorado.

Dion Arthur, M.D. '91, is working in his own orthopaedic surgery practice, Premier Orthopedics and Spine Specialists, in Hamlet, N.C.

Lawrence Casha, M.D. '91, has joined the staff of Merrimack Valley Hospital in Haverhill, Mass. Dr. Casha is board certified by the Diplomate American Board of Radiology and the National Board of Medical Examiners. He is licensed to practice radiology in five states: Massachusetts, New York, Pennsylvania, Ohio and Maryland.

Steven Katz, M.D. '91, is assistant professor of surgery in the division of plastic surgery at the SUNY Stony Brook School of Medicine in Stony Brook, N.Y. Dr. Katz also has a private plastic surgery practice in Plainview, N.Y.

Douglas L. York, M.P.H. '91, is chief administrative officer at St. Agnes Hospital in White Plains, N.Y. He continues as executive director of the behavioral health center at Westchester Medical Center, a position he assumed in 1997 when he joined the medical

center. He also continues as executive director for ambulatory services and correctional health at the medical center, positions he has held since 1999.

Randy Resnick Bernot, M.D. '92, is associate director of emergency medicine at Mount Sinai Hospital of Queens, N.Y. Her husband **Michael Bernot, M.D. '93**, is director of psychiatric emergency services at Lincoln Regional Center in the Bronx. "Hello" from them and their children: Matthew 7, Adena 5, and Tiffany 1.

Maria Torroella Carney, M.D. '92, is assistant professor of clinical medicine at SUNY Stony Brook School of Medicine and associate program director for the geriatrics fellowship at Winthrop University Hospital in Mineola, N.Y. Dr. Carney is married and has three children.

Carl Guillaume, M.D. '92, is practicing internal medicine and gastroenterology at Medical Associates of Monroe County in East Stroudsburg, Pa.

Andrew Singer, M.D. '92, is a child and adolescent psychiatrist and medical director of the Lexington Mental Health Center in Jackson Heights, N.Y. Dr. Singer also has a private practice in Hewlett, N.Y. He and his wife Anne, a lawyer, have two children, Adina 5, and Aaron 2.

Mario Amleto, M.D. '93, is enjoying life with his wife Josephine and their two children, Christopher 4, and Marco 7, in Middletown, Conn. For the past six years Dr. Amleto has been practicing family medicine in Higganum, Conn. He has stayed active with the local residency program by instructing residents in obstetric care.

Mary Yee Chow, M.D. '93, has joined the occupational health department of Morris Hospital in Morris, Ill.

Robert M. Gross, M.D. '93, is an attending anesthesiologist at Hackensack Medical Center in Hackensack, N.J. Annually for the past six years Dr. Gross has traveled on a medical mission to Ecuador. He asks for classmates to email him at rmg_md@hotmail.com to say "hello!"

she explains. "I still see women with cervical cancer," she says with dismay. Most women who visit their gynecologist for a yearly pap test don't realize—and frequently are not informed—that they are entitled to preventive health screens, including the CA125 for ovarian cancer, a blood test for early signs of breast cancer, and even a routine urinalysis, Tennell says.

"When I tell my own friends what they should ask for in terms of preventive medicine they're amazed," she says. "There's more available than most women know about."

It may seem curious for Tennell, who works with the dying, to be so passionate about quality-of-life issues for people who are not yet in

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ESTATE GIFT

Enables College to Offer Interest-Free Loans

A generous gift from the estate of Marguerite Neylan, M.D. '42 and William J. Kelley, M.D., will make it possible for New York Medical College to offer interest-free loans to its medical students. Dr. Neylan, who died in 1991, intended her bequest of more than \$826,000 to be a sign of her gratitude and "great love for the College," according to Catherine S. Halkett, M.P.H. '87, vice president for university development. "Dr. Neylan had a strong emotional attachment to the College."

Dr. Neylan attended medical school in the late 1930s and early 1940s, at a time when it was less common for women to enter medicine, she explained. "The College gave her a chance when it admitted her. She and her husband appreciated that fact and wanted to give something back."

Although Dr. Neylan's husband, William J. Kelley, M.D., graduated from Tufts Medical School, he shared his wife's affection for NYMC. He accompanied her to her 25th class reunion and the annual alumni CME conferences in Puerto Rico. Together they expressed their appreciation by prominently displaying Dr. Neylan's plaque from the Alumni Association on the mantle over their fireplace. "The impact of the gift will be profound for students who are left with tremendous debt after they attend medical school," Halkett said. "The award could really help to decrease their financial burden when they graduate."

Approximately 85 percent of NYMC students borrow money to pay for their education, accruing an average debt of \$140,000 by the time they graduate, according to Susan A. Kline, M.D., execu-

tive vice dean for academic affairs and vice provost, university student affairs. "In the Class of 2002, 86 percent incurred loans that averaged an individual debt of \$147,000," Dr. Kline explained. "After 20 years of paying back loans with interest, students end up repaying about twice what they borrowed. And these are in good times. Ten years ago students were paying four times what they borrowed. Getting an interest-free loan is a wonderful thing."

Providing interest-free loans also benefits the College, Halkett said. "Scholarships, which are awarded outright, can help only a limited number of people. Interest-free loans replenish the College's resources and provide loans for many more students over a longer period of time. "It's a pipeline of resources that we can count on to be there forever," she said. ♦

The Benefits of Planned Giving

Dr. Neylan's gift was an estate planned gift, but it is possible to make a planned gift to the College while one is still alive, says Catherine S. Halkett, M.P.H. '87, vice president for university development. In fact, individuals can receive tax benefits for their planned gifts, as well as enjoy the satisfaction of seeing the good their philanthropy can do. Depending on the planned giving arrangement, a donor can expect to benefit in some or all of the following ways:

- * Receive charitable deductions
- * Avoid capital-gains tax for gifts of appreciated property
- * Receive income for life (possibly increasing your income from what you are currently earning)
- * Reduce the federal estate tax

Donors can designate their planned gift to support research, scholarships and loan-forgiveness programs, endowed chairs and professorships, facilities and equipment or information technology, among others. Planned gifts also can be unrestricted, available for the College to use for its current and priority needs. For more information or to set up a charitable giving plan, please contact Ms. Halkett in the Office of University Development at 914-594-4529.

MILESTONES

Christos Lambrakis, M.D. '93, an epileptologist, has joined White Plains Hospital Center in White Plains, N.Y. to help run its new seizure diagnostic center. Board-certified in neurology and clinical neurophysiology, Dr. Lambrakis also practices at the Northeast Regional Epilepsy Group in White Plains.

Darrin M. Fryer, M.D. '94, is a senior partner in the emergency medicine group at Hoag Memorial Hospital in Newport Beach, Calif. Dr. Fryer is the father of two boys, 7-year-old Derrick and 5-year-old Brandon, and a girl, 2-year-old Kendall.

James L. Januzzi, Jr. M.D. '94, is on staff at Massachusetts General Hospital in Boston, serving in the cardiology division and was recently promoted to assistant professor of medicine at Harvard Medical School. His research interests include acute coronary and acute aortic syndromes. He lives in Newton with his wife Roberta and their two daughters, Caterina and Julianne.

Tess Kryspin, M.D. '94, has been named medical director of the Family Health Center at St. Vincent's Hospital in Bridgeport, Conn.

Susan Pizzuto Campanile, M.D. '95, practices internal medicine in Scarsdale, N.Y., and is affiliated with Lawrence Hospital in Bronxville, N.Y. Dr. Campanile and her husband Guy have a 3-year-old daughter, Angelina Gemma.

Bradley S. Cash, M.D. '95, is the medical director of Manhattan Rehab and Wellness and has a private practice in Manhattan. He and his wife Jennifer are the proud parents of Morgan Brooke Cash, born June 27, 2001 and are expecting their second child in April 2003.

Maja Lundborg-Gray, M.D. '95, is chair of the department of emergency medicine at Samaritan Medical Center in Watertown, N.Y., and also president of North County Emergency Medical Consultants, PC. Her husband **Daniel Gray, M.D. '91**, is a partner with Northern Radiology Associates and director of its new outpatient radiology center.

Adrian Karatnycky, M.D. '95, has joined the Seton Health practice of McGrath, Sulzman and Mohanah Medical Associates in Troy, N.Y.

Debra Etelson-Mayblum, M.D. '95, assistant professor of pediatrics at New York Medical College, is the proud mother of 2-year-old Ethan and newborn Kyle Max.

Drew Olsen, M.D. '95, has joined the medical staff of Orange Regional Medical Center in Middletown, N.Y.

Jonathan Turoff, M.D. '95, a specialist in Alzheimer's disease, is an attending neurologist at Lewistown Hospital in Lewistown, Pa.

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Loving the Business of Science

CAROL CHELI, M.S. '95

Carol Cheli, M.S. '95, has always considered herself an unusual scientist. "I like to talk *and* I like business," says Cheli, sitting in her office at Bayer Diagnostics in Tarrytown, N.Y. While she trained in laboratory research and earned her master's in experimental pathology from the Graduate School of Basic Medical Sciences, Cheli says she prefers the industry side of science, an aspect of science that encompasses a lot more than meets the eye.

As a staff scientist at Bayer, Cheli coordinates the clinical trials of diagnostic tests for prostate and breast cancer. The trials are designed to determine effectiveness of the tests compared to those currently being used. As a scientific lead for these trials, Cheli is in charge of designing protocols, recruiting and working with potential investigators, identifying potential partners, handling contracts and other legal matters, gathering and analyzing data, submitting information to the FDA and presenting data at scientific conferences. She also writes review articles for peer review journals when she has time, including *Urology*, *The Journal of Urology* and *Clinical Chemistry*.

It's a dizzying amount of work and responsibility, but for Cheli it's a challenge. "My personality lends itself to a career in this area," she says. "I like the fact that I can get out and talk about



Carol Cheli, M.S. '95

my work. I like giving presentations and being part of a strategy team that determines whether a test has diagnostic value."

Although Cheli always liked science, she wasn't sure where in the field she wanted to work. She began exploring her options in 1977, when she took a job as a junior level lab technician in the Department of Microbiology and Immunology at New York Medical College. Her work involved performing a study for the EPA, validating the AMES tests for mutagenicity. Cheli only had two years of college behind her, but finished her degree at night while working in the lab during the day. By the time she graduated she was working jointly for the Department of Physiology, with Gabor Kaley, Ph.D, professor and chairman and the Division of Pulmonary Medicine, under the direction of the late Gail Gurtner, M.D, who spurred her interest in pathology.

"I like studying how disease happens," Cheli says.

"Working with a clinician opened my eyes to disease processes. Once you understand the basics of pathology you really can go into any field." It was her pathology background, in fact, that led Cheli to industry and her first job researching experimental drugs for Storz Ophthalmics, a small pharmaceutical company in Rockland County. Just one year later a friend who

"I like studying how disease happens. Working with a clinician opened my eyes to disease processes."

worked at Bayer introduced Cheli to someone who worked there, and the networking led to her hire in 1997. The researcher has been promoted three times, most recently to her current position as staff scientist.

As far as Cheli is concerned, her success at Bayer reflects her passion for the work, just as years of working long hours, traveling and bringing work home reflect her commitment to her job. "If I hadn't proven myself first I wouldn't be at this level now," she says. ♦

MILESTONES

Arthur "Tony" Blain, M.D. '96, has been elected president of the California Medical Association Resident Physician Section for 2003. Dr. Blain works in the family medicine residency program at the University of California at San Diego in La Jolla, Calif.

Susan D. Ribeiro-Guthrie, M.D. '96, is a general pediatrician with Southwest Medical Associates in Las Vegas, Nev. Dr. Guthrie lives in Las Vegas with her husband Tim and their newborn, Brian Timothy.

Randy Goldberg, M.D. '97, has relocated to Fredericksburg, Va., where he has joined a private practice as a general internist. He may be contacted there at goldbergr@cox.net.

Karen Stanford, M.D. '97, has joined the department of surgery at the Orange Regional Medical Center in Middletown, N.Y. Dr. Stanford specializes in general and laparoscopic surgery.

Peter Q. Warinner, M.D. '97, has published his first major work in fiction, *Sumdar, The Tetralogy, Book One: Birth Into Dreams*. The first installment of a four-part series, the book is a fantasy story about Pierre, a young American man of French ancestry who undergoes an unexpected metamorphosis.

Jay Michael S. Balagtas, M.D. '98, is in his third year of pediatric residency at the Naval Medical Center in San Diego, Calif.

Jason E. Roth, M.D. '98, is a staff internist at the Eisenhower Army Medical Center in Augusta, Ga. He married Amy Rowley in May 2002 in Coeur D'Alene, Idaho.

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

Andrew A. Makrides, M.D. '99, is chief resident in the department of anesthesiology at Mount Sinai Medical Center in New York City.

Samara McLaughlin, M.S. '99, is a physical therapist with Advanced Physical Therapy Center in Stamford, Conn. She recently married John DiMattia.

The Eighties

Anthony Arciola, M.D. '80, is relocating to Westchester and Rockland County to practice urology and welcomes contact from classmates.

Jill S. Hirsch, M.D. '80, and her husband Randy are very proud of their twin daughters, Allison and Jessica, both freshmen at Columbia College and of their daughter Larissa, a high school sophomore who is on the high honor roll.

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Giving That Goes Two Ways

MARC H. ZISSELMAN, M.D. '87

One of *Philadelphia* magazine's "Top Docs 2002" is devoted to helping seniors.

There is something bittersweet in the way Marc H. Zisselman, M.D. '87, talks about his work in geriatric psychiatry.

There is a sense of awe in his description of patients who have persevered despite tremendous odds. There is a sense of gratitude for the wisdom and patience they have taught him. There also is a sense of sadness as he describes their struggle to accept the ways in which age is changing their lives.

"We're dealing with a whole different stage in the life cycle," says Dr. Zisselman, director of the division of geriatric psychiatry at Albert Einstein Medical Center in Philadelphia. "At the very least people have suffered losses in multiple dimensions. They usually have stopped working. Often they've given up their home, lost a spouse, close friends, significant others, sometimes children. They've also commonly lost a certain degree of physical function due to acute and chronic illnesses, and they're not able to do the things they used to do."

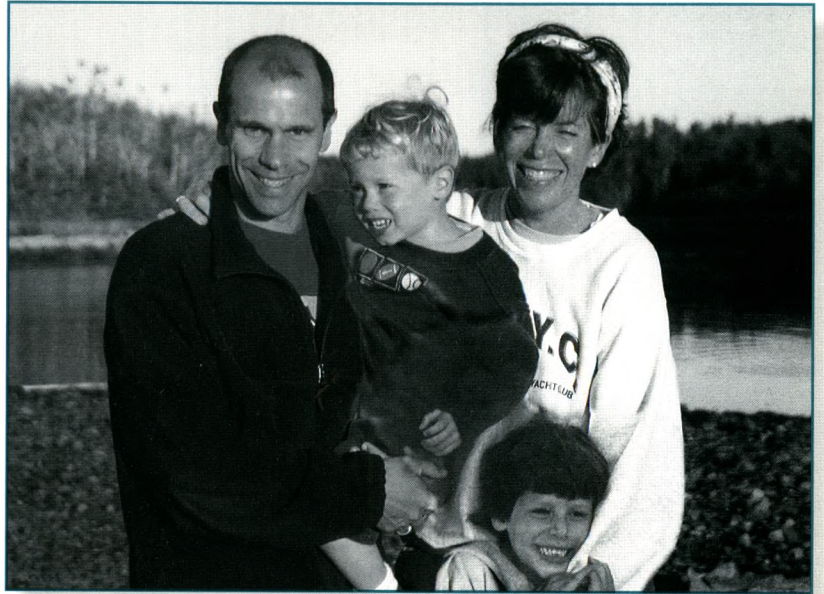
These issues seem deceptively easy to understand. It is not simple, however, for many older adults to work through the feelings these issues evoke, Dr. Zisselman says. In fact, older adults tend to be reserved when it comes to talking about emotional issues or admitting they need help. "The older generation has a longstanding stigma against mental illness. It is thought to be a sign of moral weakness, and that all one needs is a kick in the pants to overcome depression."

This kind of "tough it out" mentality can conceal genuine mental illness in older adults, Dr. Zisselman says. It also can be difficult to identify mental illness in older adults who are isolated and live alone, have little or no contact with family or friends and are unable to afford in-home support. "We don't have a true continuum of supportive living environments for a large part of the elderly population with limited resources," he says. Mental illness is frequently missed among elderly in nursing homes, where the staff commonly lack the training to recognize its signs and symptoms. Even racial and socioeconomic status may determine which nursing home

"There is a certain pleasure in working with people at this stage of their life."

residents are diagnosed with mental illness, according to Dr. Zisselman, who is researching this very topic now.

The increasing importance of recognizing and treating mental illness among older adults reflects the growth of the



Marc H. Zisselman, M.D. '87, enjoyed Winter Harbor, Maine in the summer of 2001 with, from left: Robbie, 5, Heidi, 7, and wife, Pam.

elderly U.S. population, which is expected to double from 35 million to 71 million by 2030, comprising nearly 20 percent of the population, according to the Centers for Disease Control and Prevention. This projection is a major reason why there will be such a great need for professionals who are skilled in caring for this age group, a field Dr. Zisselman finds personally and professionally rewarding.

"There is a certain pleasure in working with people at this stage of their life," he says. The rewards can be as simple as learning to sit and listen or gaining wisdom from seniors who have a lifetime of experiences to share. "Sometimes the reward is feeling inspired by those who have endured overwhelming tragedies," Dr. Zisselman says, recalling his work with a couple who survived the Holocaust. "So many older people have courage

and an incredible ability to persevere despite catastrophic stressors."

There are professional rewards as well. "People who work with older people tend to be a nice group of professionals to work with," Dr. Zisselman says. "I'm constantly interacting with geriatric specialists, physical therapists, speech pathologists, pulmonologists, gastroenterologists, rheumatologists, social workers and psychologists," he says, crediting the multi-disciplinary nature of his work for helping him become the well-rounded physician that *Philadelphia* magazine voted as one of its "Top Docs" in 1998 and 2002. "Part of our everyday practice is to work with people from all different disciplines. We are looking at the totality of the person, at how they live and at how we can make their life better." ♦

MILESTONES

Christopher Kaczmariski, M.D. '80, is president of the medical staff and chief of the department of surgery at the Bariatric Care Center of Pennsylvania Hospital in Langhorne, Pa. He and his family live in the Philadelphia area.

Mark S. Noveck, M.D. '80, board certified in internal medicine, is affiliated with PENN Care-Bala Cynwyd Medical Associates in Bala Cynwyd, Pa.

Lance Parton, M.D. '80, a neonatologist, has joined the staff of Putnam Hospital Center in Carmel, N.Y.

Rachel Cyrlak, M.D. '81, was appointed chief of staff at Joe DiMaggio Children's Hospital in Hollywood, Fla. in May 2002. She is also a senior partner at Children's Medical Center in Hollywood.

Rachel Elder, M.D. '81, is chief of pathology at Crouse Hospital in Syracuse, N.Y.

Mayer Grosser, M.D. '81, has joined the department of medicine at the Orange Regional Medical Center in Middletown, N.Y. Dr. Grosser specializes in nephrology.

Kevin Pehr, M.S. '81, has graduated from the U.S. Army War College Distance Education Class at Carlisle Barracks in Carlisle, Pa. Col. Pehr, a commander, is assigned to the 865th Combat Support Hospital in Utica, N.Y.

Jesse A. Stoff, M.D. '81, a naturopath, homeopath and viro-immunologist, is the medical director of Solstice Clinical Associates in Tucson, Ariz. Dr. Stoff, who co-authored the best selling book *Chronic Fatigue Syndrome: The Hidden Epidemic*, specializes in the treatment of people with severe chronic illnesses. He has appeared on "Larry King Live" and "Good Morning America."

Alan H. Morelli, M.D. '82, is working with New England Pediatrics, LLP in New Canaan, Conn. Dr. Morelli sends his regards to all.

Brian K. Solow, M.D. '82, is practicing family medicine in Irvine, Calif., where he is associate medical director at Bristol Park Medical Group.

Amy Batterman-Ditcheck, M.D. '83, says she is busy with Rebecca in junior high, Lisa in the fourth grade, Brandon in third grade, Sammy in kindergarten and Ronald, who is running around the house.

Ilona Figura, M.D. '83, is living happily in Cheshire, Conn., with her husband Paul and their two children, Rachel 11, and Aaron 17, who has been accepted at George Washington University. After 14 years of solo private practice, Dr. Figura is working part-time for another doctor. Now she has time to enjoy her family and train for triathlons.

Deborah Fried, M.D., '83, writes, "When the Class of '83 put on a

Snake Expert Forgoes ER for the Dean's

ROBERT A. BARISH, M.D. '79

It is 1980 and Robert A. Barish, M.D. '79 is working in a refugee camp on the Cambodian border. An Asian cobra has bitten a man and Dr. Barish watches, amazed, as three interpreters urinate over the bite, hoping to neutralize its poisonous venom. Quickly, Dr. Barish intervenes, replacing folklore with modern medicine: a dose of anti-venom, which throws the man into near-fatal anaphylactic shock.

Had Dr. Barish known the bite was "dry" or venomless, he would never have administered the drug. As a soon-to-be resident in emergency medicine, however, all he knew about snakebites was what he'd learned as an Eagle Scout,

"People looked at you as if you had three heads if you said you wanted to go into emergency medicine."

and most of that was folklore too. That's when he realized that treating snakebites, like any other potentially fatal injuries, would have to be part of his job as an ER physician.

"An ER physician is just as likely to see a bite from an exotic snake as an indigenous snake," says Dr. Barish, professor of surgery and medicine and associate dean for clinical affairs at the University Of Maryland School Of Medicine in



Robert A. Barish, M.D. '79, right, and Barry S. Gold, M.D., co-authored an article in the *New England Journal of Medicine* on the importance of treating venomous snakebites immediately.

Baltimore. In fact, exotic snakes kept as pets commonly bite people in the U.S., he advises. The good news is that most snakebites are not fatal. Of the 2,000 bites reported in the U.S. each year—as many as 6,000 go unreported—only five or six are fatal, with deaths occurring mostly in children, the elderly or when anti-venom is given too late, in inadequate doses, or not at all, he says. "Rarely is somebody killed from a snakebite, yet people are terribly frightened by snakes."

Dr. Barish, on the other hand, is utterly fascinated by snakes and has been since he took a sabbatical from 1980 to 1981, before beginning his residency in internal medicine at Saint Vincent's Hospital-Manhattan, to work with the International Rescue Committee in Cambodia and Somalia. After completing his residency in internal medicine in 1983, Dr. Barish

began his residency in emergency medicine at the Georgetown-George Washington-Shock Trauma Center at The University of Maryland School of Medicine, which he graduated in 1985. He is board certified in internal medicine and emergency medicine, a specialty that captivates him even though it is not always highly respected. "People looked at you as if you had three heads if you said you wanted to go into emergency medicine," he says. Still, he gravitated towards the fast pace and decision-making that emergency medicine requires. "I love the action," he says. "You're like a conductor, conducting an orchestra. There are so many different parts you have to make work to be successful."

His first job reflected his success. He was appointed assistant professor at the University of Maryland

Office

School of Medicine and chief of emergency services—the youngest ER chief in the school's history—at the University of Maryland Medical Center in Baltimore. And then there are the snakes.

Dr. Barish is a recognized authority on the treatment of venomous snakebites. He's published numerous articles, including one with co-author Barry S. Gold, M.D., in the *New England Journal of Medicine*. He also has appeared on national television and radio, hoping to demystify and calm people's fears of being bitten by snakes, which, he assures, usually happens only after the snakes have been disturbed: "About 50 percent of the time people put themselves in harm's way." Perhaps more important, Dr. Barish has tried to warn the public against trying traditional "treatments" for snakebites—urine, ice, tourniquets, cutting open the wound and sucking out the venom and electric shock—that only delay medical treatment. "Just go to the nearest hospital," he urges. "The best treatment if you're bitten is a good set of car keys."

A man who likes risk, Dr. Barish is able to dive into the unknown, whether it is a jungle in Cambodia, an emergency room, or even his new role as an associate dean at the University of Maryland. "You have to be prepared to do multiple things in your life, including jobs that feel a little over your head," he says. Then he reflects, "I don't know where this will take me from here." It wouldn't be the first time. ♦

M I L E S T O N E S

show, we sang to 'current' music—Pink Floyd's 'The Wall.' Scary, isn't it?"

Marlane Casper Guttmann, M.D. '83, is practicing radiology at a community hospital in Meadowbrook, Pa., raising two teenagers—a high school freshman and a senior—and enjoying life and family with husband Harvey who is a practicing gastroenterologist.

Joan P. Liman, M.D. '83, M.P.H. '93, retired in June 2002 after working for nearly 20 years in medical education. Dr. Liman devotes much of her time to theater. In addition to taking acting and musical performance lessons, she volunteers at Amas Musical Theatre, a New York City company devoted to multi-ethnic casting and education. Recently Dr. Liman formed her own theater company, LimanAde Productions, whose focus is the development of life-affirming musicals. Any classmates turned playwrights or composers are welcome to submit their work!

Duane Austin, M.D. '84, is in practice in Hartford, Conn. He and his wife Arlene have three children: Christine, Caroline and Michael.

Deborah Coscia-Brandon, M.D. '84, is married to **Mark Brandon, M.D. '84**, and working in Rockville Centre, N.Y.

Kevin C. Delahanty, M.D. '84, has been working at the U.S. Naval Hospital in Bremerton, Wash., since his term at the U.S. Naval Hospital at Camp Lejeune, N.C. expired. He and his wife Joan Elizabeth are parents of Emma Rose, born in September 2002.

James Kenny, M.D. '84, is associate director of emergency medicine at Staten Island University Hospital in Staten Island, N.Y. Dr. Kenny will be celebrating his 18th wedding anniversary with his wife Viola Ortiz, M.D., and their children, James and Megan.

Dennis L. McGill, M.D. '84, is medical director in the emergency department at Mountainside Hospital in Montclair, N.J.

Russell Settipane, M.D. '84, is looking forward to seeing his classmates at the 20th reunion in 2004. He asks for people planning to attend to send him an email at Setti5@aol.com to establish an online planning group.

Howard Sussman, M.D. '84, is chief medical officer and vice president of medical affairs at Mercy Medical Center in Rockville Centre, N.Y.

Peter E. Bentivegna, M.D. '85, would love to see "the gang" at the growing Cape Cod summer reunions.

Elizabeth M. Clark, M.D. '85, recently left the department of geriatrics at Mt. Sinai Hospital to join the department of medicine at Lenox Hill Hospital as the first director of a new division of geriatric medicine. Dr. Clark and her husband Richard Claman live in the Lenox Hill neighborhood with their two daughters: Emily, who was a baby at NYMC Commencement in 1985 and is a

freshman at the University of Rochester, and Karen, who is an eighth grader.

Richard Bazarian, M.D. '86, is director of the division of ophthalmology at Maine Medical Center in Portland.

Philip Caron, M.D. '86, practices hematology/oncology at the Westchester satellite of Memorial Sloan-Kettering Cancer Center in Sleepy Hollow, N.Y. Dr. Caron lives in Manhattan with his wife Susan Benz and their 8-year-old twin sons Francis and Michael.

Irwin Goldstein, M.D. '86, is an associate of Long Island Ob/Gyn Associates in Massapequa, L.I. He is affiliated with New Island Hospital, North Shore University Hospital at Plainview and Winthrop University Hospital, specializing in complicated pregnancies, ultrasound and infertility.

Joseph Rafferty Jr., M.D. '87, a family practice physician, has joined the staff of South Shore Hospital and Harbor Medical Associates in South Weymouth, Mass.

Elliott Brown, M.D. '88, is affiliated with the Cardiology Center of North Jersey in Clifton, N.J.

Victoria T. Crescenzi, M.D. '89, is a developmental/behavioral pediatrician and a commander in the U.S. Navy, working at the Naval Medical Center in Portsmouth, Va. Dr. Crescenzi and her husband Peter are the parents of Nicholas and Jilian.

Thomas M. DeBerardino, M.D. '89, has completed a European traveling fellowship as one of three sports medicine fellows selected for a 2002 tour. Dr. DeBerardino visited and lectured at orthopaedic clinics and research facilities throughout Europe. He practices orthopaedic sports medicine at the Orthopaedic Surgery Service at Keller Army Hospital in West Point, N.Y.

Donna M. Gallagher, M.D. '89, has moved back to New York City and is working at Maimonides Medical Center in Brooklyn.

Gregory Thomas Jarrin, M.D. '89, is a general surgeon at the Tuba City Medical Center in Arizona. He is also the regional representative to the Diocesan Pastoral Council from the Northern Arizona Region and a member of the St. Vincent De Paul Society.

Robert Gundel, Ph.D. '89, has been named vice president of preclinical research for Xoma Ltd., a biopharmaceutical company in Berkeley, Calif.

The Seventies

Donald E. Sawyer, M.D. '70, is an assistant professor of urology at the University of Mississippi Medical Center. As director of the urology clinic at the VA Medical Center in Jackson, he teaches urology residents and medical students. He and his wife Anne, a medical librarian at the medical center, enjoy living in the South.

Mark Leitman, M.D. '71, reports that the sixth edition of his book, *Manual for Eye Examination and Diagnosis*, drafted during his senior year of medical school while on ophthalmology rotation, has been translated into Japanese, Indian, Russian, Indonesian, Italian, Spanish and Greek. Johnson & Johnson also has purchased 40,000 copies to distribute worldwide.

Kathleen Cardinale-Nelson, M.D. '71, is senior associate dean for students at the University of Alabama School of Medicine in Birmingham. Dr. Nelson, chair of the Southern Group on Student Affairs, recently did a spot on child health for the CWK Network, an NBC affiliate. Her oldest son is graduating from medical school and begins a psychiatric residency.

Steven F. Horowitz, M.D. '72, is director of cardiology for Stamford Health System based at Stamford Hospital in Connecticut. Professor of medicine and nuclear medicine at Albert Einstein College of Medicine in the Bronx, Dr. Horowitz is known for the use of Positron Emission Tomography imaging and other noninvasive methods to diagnose cardiac conditions. He has been one of *New York* magazine's "Best Doctors in New York" for the last 10 years and is also listed in *Marquis' Who's Who in Health and Medicine*.

Patrick M.J. Hutton, M.D. '74, was elected in September 2002 as speaker for the House of Delegates for the Florida Medical Association.

Carl Victor, M.D. '74, has opened his own internal medicine practice in Ewing, N.J. He specializes in endocrinology, diabetes management and metabolism disorders.

Robert Dawe, M.D. '75, is chief of orthopaedic surgery at Bridgeport Hospital in Connecticut.

Rosemary LoCastro, M.D. '75, is practicing diagnostic radiology and nuclear medicine with Capital Imaging Associates in Trenton, N.J. Also affiliated with the Robert Wood Johnson Hospital in Hamilton, N.J., she and her husband Larry live in Washington Crossing, Pa., with daughters, Kate, 20, a junior at Washington and Lee University, and Mary, 17, a senior in high school.

Jeffrey M. Behrens, M.D. '76, has successfully been recertified in geriatric medicine.

Maurice Haberman, M.D. '76, a psychiatrist, has joined Occupations, Inc., a not-for-profit human service agency in Middletown, N.Y. He is a member of several branches of the American Psychiatric Association.

Vincent Vigorita, M.D. '76, is a pathologist at the Lutheran Medical Center in Brooklyn. He sends his regards to all and is still enjoying thoughts of the 25th reunion.

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M I L E S T O N E S

Douglas A. Byrnes, M.D. '77, is practicing medicine in Huntington, N.Y. His wife Kathleen is a part-time student at C.W. Post College. He is father to **Luke Byrnes, M.D. '03**; Erin, a law student; and Elizabeth, who is married and working for a marketing firm in Long Island.

Stuart J. Kaufman, M.D. '77, an assistant clinical professor of ophthalmology at the University of South Florida Medical School, is in private practice specializing in cataract and laser surgery.

Howard R. Krauss, M.D. '77, has co-founded Pacific Eye & Ear in Los Angeles. He and his colleague in otorhinolaryngology, Chester Griffiths, M.D., were recently featured in a Discovery Health channel documentary concerning their revolutionary eye-saving sinus and orbital cancer surgery for celebrity Gary Busey.

Charles Lanzieri, M.D. '78, was elected president of the American Society of Head and Neck Radiology in September 2002. He lives with his family in Shaker Heights, Ohio.

Joseph P. Merlino, M.D. '78, M.P.A. '78, adjunct professor of psychiatry and behavioral sciences, as well as a supervising and training analyst at New York Medical College, has been appointed clinical director of the department of psychiatry at Queens Hospital Center. Dr. Merlino is also clinical professor of psychiatry at New York University School of Medicine. He is a fellow of the American Psychiatric Association, a member of the Group for the Advancement of Psychiatry and president-elect of the American Academy of Psychoanalysis and Dynamic Psychiatry.

Donald T. Pasquale, M.D. '78, is associate chief of staff for research and development at the Stratton VA Medical Center in Albany, N.Y. Board certified in hematology and internal medicine, Dr. Pasquale has been a practicing hematologist at the medical center for 17 years and is an associate professor of medicine at Albany Medical College. He and his wife Colleen live in Poestenkill and are the parents of Alanna and Adam.

John T. Repke, M.D. '78, is professor and chairman of obstetrics and gynecology at the Pennsylvania State College of Medicine-Milton S. Hershey Medical Center in Hershey, Pa. Previously he was professor and chairman of ob/gyn at the University of Nebraska Medical College in Omaha.

George Chapkin, M.D. '79, is practicing medicine in Coral Springs, Fla. His daughter Jennifer is a senior at the University of Central Florida; son Zachary is a freshman at Tulane University in New Orleans, and daughter Chelsea is a freshman at Spanish River High School in Boca Raton.

The Sixties

William Hardy, M.D. '60, has been honored with the William Hardy Chair in Obesity Research at the Wayne State University School of Science's department of nutrition and food science in Detroit.

Ronald H. Hartman, M.D. '60, working full-time as an ophthalmologist in Lakewood, Calif., has retired as chairman of the governing board of the Lakewood Regional Medical Center. Dr. Hartman is happy to report the arrival of his eighth grandchild.

Robert E. Hassler, M.D. '60, is working in a two-person ob/gyn practice in Supply, N.C. and serves on various hospital boards, including the Brunswick County Health Board. He enjoys traveling and especially visiting his children and grandchildren.

H. Paul Lewis, M.D. '60, is actively practicing and "working hard" in neurosurgery in Cincinnati, Ohio.

Rafael E. Perez, M.D. '60, sends greetings and wishes for health and happiness to the Class of 1960.

Andrew J. Peters, M.D. '60, was the 2002 recipient of the Nassau-Suffolk Hospital Council's Theodore Roosevelt Award for Outstanding Service. The award is presented yearly to an outstanding recipient in the spirit of Theodore Roosevelt's lifelong devotion to public service. Dr. Peters lives with his wife Frances in Rockville Centre, N.Y., where he has spent the past 40 years working at Mercy Medical Center and in private practice. The couple has 4 children and 10 grandchildren.

Howard D. Harrison, M.D. '61, is still boating and busy with the governing committee of the Senior Physicians Group of the American Medical Association in Cape Coral, Fla.

Burton P. Hoffner, M.D. '61, retired from the practice of ophthalmology, is enjoying golf, bridge and adult education in Palm Beach Gardens, Fla. He and his wife Cookie have two sons who are lawyers and one who is board-certified in emergency medicine in the Los Angeles area. They also have five grandchildren. Dr. Hoffner says he still sees **Myron Teitelbaum, M.D. '61**, and **Al Glasgold, M.D. '61**, often and would like to hear from other classmates.

Fred L. Humeston, M.D. '61, is in private pediatric practice with no retirement in sight. He and his wife Liz who live in Danville, Calif., enjoy taking trips with their seven grandchildren and spending time in the northern Sierras.

Harvey A. Reback, M.D. '61, is practicing internal medicine in a four-man internal medicine group in Fall River, Mass.

Edwin Stempler, M.D. '61, is living in Rancho Mirage, Calif.

William F. Bierer, M.D. '62, is medical director of the Los Angeles Unified School District in California and lives in Beverly Hills, Calif.

Howard A. Jewell, M.D. '62, enjoyed his 40th medical school reunion with classmates and would like to hear from others at HAJEWELL@juno.com.

Gerard Lawrence, M.D. '63, retired in January 2002 after 33 years of practice in orthopaedic surgery and has been appointed to the board of directors of the University of Connecticut Health Center in Farmington.

James K. McAleer, M.D. '63, retired as a urologist after 27 years on the medical staff of Medina General Hospital in Medina, Ohio. Dr. McAleer is credited with establishing seven hospice programs in the greater Cleveland area. He also has traveled frequently to Bosnia-Herzegovina in Yugoslavia, where he experienced the religious pilgrimage to the city of Medjugorje and worked to help raise money and deliver thousands of pairs of shoes to refugees and orphans. Now that he is retired, Dr. McAleer plans to return to Medjugorje with his wife, spend time in the Adriatic with friends, bike in Moab National Park in Utah with his sons, Ryan, Mike and Patrick, play golf and enjoy his grandchildren.

Jack Norman, M.D. '63, a plastic surgeon practicing in Miami, is past president of the Florida Society of Plastic Surgeons and the Greater Miami Society of Plastic Surgeons.

Lewis H. Roht, M.D. '64, recently retired from the Aventis Pharmaceutical Company where he was director of epidemiology and drug safety. He is now doing consulting in epidemiology and drug/product safety.

Ronald B. Rudlin, M.D. '64, is practicing medicine in Rancho Mirage, Calif.

Thomas Santucci Jr., M.D. '64, has been appointed chairman of the department of medicine at the Brookdale University Hospital and Medical Center in Brooklyn. Clinical assistant professor of medicine at Cornell University Medical College and New York University Medical Center, he is board certified in internal medicine, cardiovascular disease and geriatrics. He also is an honorary surgeon in the New York City Police Department.

Harvey White, M.D. '64, is practicing, teaching and writing about psychiatry and family therapy. He is on staff at St. Luke's-Roosevelt Hospital in New York City and on the faculty at the Columbia University College of Physicians and Surgeons.

Patricia Tennell

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jeopardy. And yet, "helping people who are so destitute and sick and suffering" has strengthened her belief that living a quality life supported by family and friends, being productive and practicing good health can go a long way in sparing people the kind of illness and pain she has witnessed for so much of her career.

Tennell started her nursing career as an LPN at Calvary in 1968. Providing hospice and palliative care to its patients, the hospital is affiliated with NYMC, which sends third-year medical students to learn about end-of-life care.

Tennell describes herself as a "very education-oriented" woman who loves to research and teach. She has RN and bachelor degrees in nursing, as well as a public health degree and a doctorate in health services administration. "I've always felt that in order to keep up in health care you have to have an ongoing education," she says. While she never envisioned herself as a nursing supervisor, her natural leadership skills landed her on the managerial track. In a short period of time she was promoted from nursing supervisor to assistant administrative director of nursing to associate administrative director and to her current position as vice president of patient care services. "I'm a born leader and I was always that way," she says.

Sometimes Tennell muses about becoming a full-time researcher or college professor. Although she doesn't know what her future holds, she does know that she will always be committed to the quality of life for the dying—and the living. ♦

M I L E S T O N E S

Harvey G. Masor, M.D. '65, practices internal medicine at Irvington General Hospital in Irvington, N.J., where he was recently honored for his service to the hospital and the community. Dr. Masor is the father of Alyssa, who is working on a degree in Yiddish at Columbia University in New York City; Danielle, who graduated Swarthmore College in Pennsylvania; and Renee, who attends Tulane University in New Orleans.

Tony Cohen, M.D. '66, is retired and living in Ridgefield, Conn. He spends time skiing, diving, sailing and laughing.

Burton Grebin, M.D. '66, president and CEO of St. Mary's Healthcare System for Children, received the New York Hospital Queens Chairman's Award for his outstanding support of children's services. Dr. Grebin is professor of clinical pediatrics at Columbia University College of Physicians and Surgeons. He also is a member of NACHRI, the National Association of Children's Hospitals and Related Institutions' Committee on Child Advocacy, the medical advisory committee of the Children's Health Network of New York and the executive committee of the American Academy of Pediatrics Section on Home Health.

Alan J. Ostrowe, M.D. '66, is working with Pain Management Services in Baton Rouge, La. He was elected president of the Baton Rouge Parish Medical Society for 2003.

Judy Fiedler Topilow, M.D. '67, and **Arthur Topilow, M.D. '67**, are busy with their respective pediatric and hematology/oncology practices. Dr. Arthur has also been busy with the piano in his spare time and this summer will be performing in a jazz concert "with the pros" at the 92nd Street Y in New York City.

The Fifties

John W. Mills, M.D. '53, is looking forward to his 50th reunion, especially to renewing friendships with others who lived in Pinsky's Palace. Dr. Mills is the father of four and grandfather of nine and will be celebrating his 50th wedding anniversary next year.

Maurice Safrin, M.D. '53, living in Seattle, is pleased to be able to get together with former classmates, **William Spence, M.D. '53**, who lives nearby on Mercer Island, and **Ray Fergusson, M.D. '45**, who lives next door.

A.S. Campbell, M.D. '54, is practicing psychiatry in Ridgewood, N.J. He celebrated his 50th wedding anniversary in June 2002. His son, **Arthur Scott Campbell, M.D. '86**, is practicing at Westchester Medical Center.

Edward John Day, M.D. '54, retired in June 2000 after 42 years of ob/gyn practice. He lives in Woodbridge, Conn.

Grace Jorgensen, M.D. '54, is enjoying good health and continues to

appreciate her NYMC education and interesting work as an ob/gyn with the Woman's Healthcare Group in Niskayuna, N.Y. Her daughter, **Clarissa Westney, M.D. '81**, is also an ob/gyn with the Woman's Healthcare Group.

Fred N. Cushmore, M.D. '56, still enjoys putting in a day or two at St. Joseph's Regional Medical Center in Paterson, N.J., but plans to retire by the end of the year. His 12 grandchildren, with the oldest starting college next year, keep him busy. "Regards to my classmates whom I'll hope to see in 2006!"

Martin H. Floch, M.D. '56, has been reappointed clinical professor of medicine at the Yale University School of Medicine. Dr. Floch, who also is the editor of the *Journal of Clinical Gastroenterology*, lives in Westport, Conn. and has eight grandchildren.

Martin S. Weseler, M.D. '56, a board certified orthopaedic surgeon, has been honored by Victory Memorial Hospital in Brooklyn, where he served as chief of orthopaedic surgery from 1973 to 1997. In private practice since 1961, he also has written dozens of professional articles for journals such as *Foot and Ankle*, *Journal of Bone and Joint Surgery*, *Journal of Trauma*; *New York State Journal of Medicine* and *Orthopaedic Review*.

William H. Brown, M.D. '57, lives in Alexandria, La., and reports having had an enjoyable day last summer in New York, where he and his wife Gege visited classmate **Donald Bradley, M.D. '57**, and his wife Barbara.

Albert L. Huber, M.D. '57, sees patients three days a week in his Charlottesville, Va., office. Dr. Huber still has sheep and does his own shearing.

Thomas P. Mathews, M.D. '57, is still teaching two days a week at the University of California, San Francisco.

Lewis A. Dalburg, M.D. '58, now retired, hopes to get to the 45th class reunion.

John Sadowski, M.D. '58, an otolaryngologist, is still working at Good Samaritan Hospital in Suffern, N.Y. "Retirement is not yet lurking!"

John G. Weg, M.D. '59, was named a master fellow by the American College of Chest Physicians. It is the 18th such award to be given in the 67-year history of the ACCP. Dr. Weg lives and practices medicine in Ann Arbor, Mich.

The Forties

Merrill Grayson, M.D. '41, is a distinguished professor of ophthalmology at Indiana University School of Medicine in Indianapolis. Dr. Grayson has contributed to the scientific literature and has written several successful texts, including *Diseases of the Cornea*, considered a classic of 20th century medicine.

In Memoriam

Henry P. Leis Jr., M.D. '41, died March 7, 2003 at 88 in Myrtle Beach, S.C.

Albert King Schoenbucher, M.D. '42, died November 5, 2002, at 84 in Fort Worth, Texas.

Sheldon H. Kaften, M.D. '43.

Clifton Portnoff, M.D. '43, died at 82.

Gregory S. Slater, M.D. '44, died November 7, 2002, at 82 in New Britain, CT.

Nicholas DeVito, M.D. '45, died March 3, 2003, at 82 in Smithtown, N.Y.

William F. Peterson, M.D. '46, died January 14, 2003 at 80 in Colesville, Md.

Robert A. Seitz, M.D. '47, died November 4, 2002, in Valhalla, N.Y.

Robert M. Schumann, M.D. '50, died February 6, 2003.

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

Richard L. Boughter, M.D. '53, died July 13, 2002 in Rochester, N.Y.

Leo Nathan Dienstag, M.D. '53, died in October 2002.

Carl Blanchett, M.D. '54, died December 10, 2002, at 81 in Sleepy Hollow, N.Y.

Bertrand Hopkins, M.D. '56, died November 16, 2002 at 72 in Old Groton, Mass.

Charles Sieger, M.D. '56, died November 30, 2002, at 81 in Naples, Fla.

John T. Howard, M.D. '58, died November 26, 2002, at St. Vincent Hospital in Worcester, Mass.

Arthur F. Wolber, Jr., M.D. '59, died December 14, 2002 at 86

Daniel B. Rosenberg, M.D. '84, died July 2, 2002.

Faculty

Rhea Marie Barton, M.D., died on May 8, 2003, at 45. A family physician who lived in Yonkers, Dr. Barton was assistant professor in the Department of Family Medicine and associate director of New York Medical College at St. Joseph's Family Practice Residency Program. Contributions in Dr. Barton's memory can be made to the American Foundation for AIDS Research (AmFAR), 120 Wall Street, 13th Floor, New York, NY 10005 or St. Joseph's Medical Center, c/o Dr. Joseph Halbach, Department of Family Practice, 127 S. Broadway, Yonkers, NY 10701.

Martin Deutsch, Ph.D., died June 26, 2002, at 76. His research on the link between the environment and children's ability to learn formed the underpinnings for the creation of the Head Start early intervention program for children. Deutsch directed the Institute for Developmental Studies at New York Medical College, which he founded in 1958 with his wife Cynthia. In 1966 the institute moved to New York University, where Deutsch remained director until retiring in 1994.

Cornelius J. Walters, M.D., associate professor in the Department of Psychiatry from 1982 to 1994, died on January 28, 2003.

Simon Wapnick, M.D., assistant professor of cell biology and anatomy and of anesthesiology and director of clinical anatomy programs, died May 25, 2003. He was 65.

Calendar of Events

July 10, 2003

Alumni Regional Dinner
The Boston Marriott Hotel
Copley Place, Boston, Mass.

July 21, 2003

11th Alumni Golf Benefit
Westchester Hills Golf Club
White Plains, N.Y.

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

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