

Who Will Deliver Baby in 2010?

CANCER CENTER UPDATE
METABOLIC SYNDROME
ALUMNI NEWS AND FEATURES



Message from the Dean

Since assuming the role of Interim Dean, there is one question I have been asked a lot lately: What is going on at New Jersey Medical School?

Part of the answer is in the facts behind some of the media coverage over the last several months. First, New Jersey Medical School's accreditation status has not been affected in any way by some of the administrative—not clinical or educational—issues raised by our accrediting organizations. Second, UMDNJ President Dr. John Petillo and the University leadership have put into place a 12-point management reform initiative to enhance transparency and accountability in all aspects of institutional operations. And finally, an ambitious strategic vision for the entire university adopted in June addresses many important issues and sets our course on a positive trajectory.

What *is* going on? The key to the answer is in our research laboratories, our clinical care facilities and our classrooms. This issue of PULSE provides a glimpse into the extraordinary activity on our campus and what is *really* going on here.

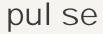
One article explores metabolic syndrome, a newly identified cluster of medical irregularities that includes obesity, high blood pressure, elevated blood sugar levels and abnormal lipids. NJMS faculty are conducting clinical research and gaining critical expertise in this area. Another article previews the state-of-the-art cancer center that is scheduled to open in early Fall 2006.

A discussion of the future of obstetrics in the face of the prohibitive cost of malpractice insurance draws some reassuring conclusions. And the story of two candidates for combined MD/PhD degrees, married to each other after meeting here, underscores the stellar quality of the students we are attracting to our school.

Some things will never change. One of the most distinctive qualities of the faculty, staff and students of NJMS is their unwavering commitment to the school's mission. The pages ahead focus on just that.



Read more about Dr. Johnson, the first alumnus to serve as dean of New Jersey Medical School, on page 19.



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NJMS Pulse is published twice each year by UMDNJ– New Jersey Medical School (NJMS) and UMDNJ– The University Hospital (UH). We welcome letters to the editor and suggestions for future articles. Send all correspondence to:

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UNIVERSITY OF MEDICINE & DENTISTRY OF NEW JERSEY

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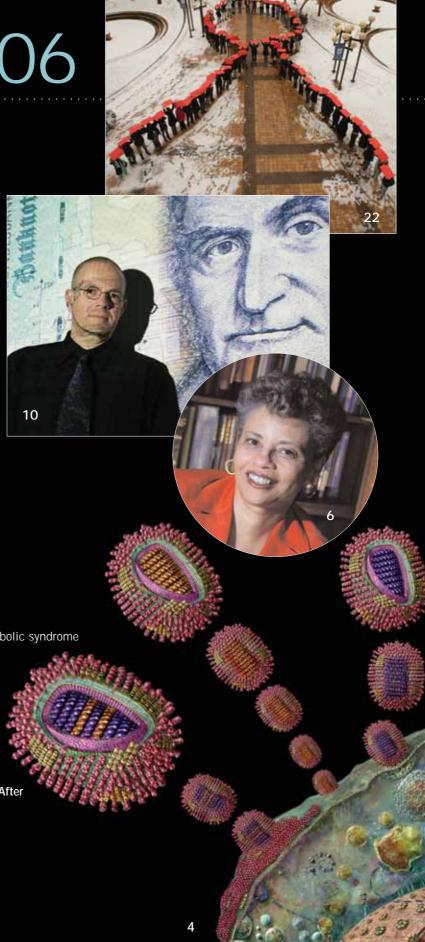
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2006 Cancer Center Opening

The NJMS-UH Cancer Center promises to transform the landscape of cancer care in north Jersey.

HE New Jersey Medical School-University Hospital Cancer Center, rising dramatically before our eyes on South Orange Avenue in Newark, asks to be noticed. Its gleaming glass and metal structure—nine stories tall—beckons the sunlight into its large windows and soon will be calling to patients as well. Its director, Harvey Ozer, MD, professor of microbiology and molecular genetics at New Jersey Medical School (NJMS), and a cancer researcher there, says that he would like to guarantee that the diagnosis of cancer is the last negative experience its patients will have. He insists that every visit to the center will be positive, and that the leadership group, including Lawrence Harrison, MD, associate director, and James Wall, chief operating officer, is determined to ensure all the details that will support this goal.

the entire building occupies E level; research laboratories are on F, G and H, and a mouse facility is on I level. The building's total space is 220,000 square feet.

One of Ozer's main jobs right now is to attract top researchers to the Center, since a major thrust of the new venture is the marriage of basic and translational research with clinical endeavors. Levels F. G and H will each have 10,000 square feet of adjustable space for large open laboratories, offices, areas for shared instrumentation and conference rooms that will seat 50 to 60. These floors will also house "core" facilities for UMDNJ's Newark campus and will serve as a "bridge" to the medical school. H will have the building's facility for cell culture; G will house the core molecular imaging center; and F level, the Center for

A priority is to bring cancer patients in for diagnosis and treatment when their disease is in the early stages.

The building will house the premier cancer care and research facilities for north Jersey, according to Ozer, and will open in early fall of 2006. Its first three floors (A, B and C) are designed for ambulatory cancer services and are physically connected to UMDNJ–University Hospital (UH). D level is vacant for future expansion. Major machinery for

Applied Proteomics. The latter two will relocate from the Medical Science Building. These facilities will be used by UMDNJ researchers housed at the Cancer Center and those whose laboratories are elsewhere on the Newark campus.

According to the director, several established investigators at UMDNJ have already been invited to locate their pro-

grams on H level—to provide a nucleus of funded researchers for the facility. These include Ian Whitehead, PhD, Department of Microbiology and Molecular Genetics, Sergei Kotenko, PhD, Department of Biochemistry, Robert Wieder, MD, PhD, Department of Medicine, Terri Wood, PhD, and Steve Levison, PhD, Department of Neurosciences, as well as Ozer and Harrison.

"These scientists will continue to have responsibility to their home departments," says Ozer. Other investigators will be recruited from outside the institution—10 independent researchers per floor, for a total of 30.

"We're building bridges to other scientists and clinicians on the Newark campus," says the director. "The Center's success will be dependent on good relationships with the larger UMDNJ and cancer communities."

Radiation oncology will be housed on A level, which is completely below ground. B level is below-ground in the front of the building, but rises above-ground in the back, where the Center's healing garden will grow. While patients undergo chemotherapy, they will be able to view greenery, flowers and the beauty of the changing seasons. B level will also house administrative offices.

C level is the entry floor, which will house diagnostic suites, including a Women's Health Center. "The theme of the building is light and space," Ozer says, a theme that its director hopes will



help allay patients' anxieties about seeking treatment.

The Center will have 11 areas of clinical strength and each will have a dedicated team composed of surgical, medical and radiation oncologists. The "site specific" teams will specialize in: breast, gastrointestinal, genitourinary, gynecologic, head and neck, hepatobiliary, neurologic, pediatric, pulmonary and soft tissue/bone cancers and lymphoma/leukemia. "We already have major strength in many of these areas," explains Ozer, "and we'll build on those strengths."

One point of interest, says the director, is that right now, there is a disproportionate number of gynecological (cervical), head and neck, soft tissue (bone and muscle), and neurological cancers being seen by specialists on the UMDNJ Newark campus, but not nearly the number of breast, colon and prostate cancers that would be predicted. "This is based on the areas where we have the greatest surgical strength," he observes.

"There is no pediatric oncology right

now," he continues, "but it is another area for possible future development."

Among the director's top priorities is to build up additional expertise in medical oncology, but to accomplish this in steps. Recruitment for more medical hematologists/oncologists will begin in early 2006.

Another priority is to bring cancer patients in for diagnosis and treatment when their disease is in the early stages. "We tend to see cancer patients very late into their disease," says Ozer. The Center will develop an active outreach effort and is committed to working toward eliminating health disparities.

It will also offer all patients complementary/alternative medicine approaches to ease the side effects of their treatment and the stresses of living with cancer. Support groups will be organized on site. "We are working closely with Dr. Adam Perlman, director of the Institute for Complementary and Alternative Medicine at UMDNJ," Ozer states.

The leadership team will be composed

of five individuals with different areas of expertise. Larry Harrison, MD, is chief of the Division of Surgical Oncology at UH and NJMS. His clinical and research interests are in gastrointestinal and hepatobiliary malignancies, with a special interest in surgery for metastatic and locally advanced tumors. Harrison has been at UMDNJ since 1997.

The newest member of the leadership team is James A. Wall, Sr., who arrived on campus on November 1. He comes to UMDNJ from Dana Farber Cancer Institute in Boston, where he served as Director of Operations for more than six years. He also has an extensive health care management background which includes serving in the capacity of president and CEO within the for-profit and not-for-profit health care sector. He holds a Bachelor of Arts degree from North Carolina Central University and a Master of Health Administration from Duke University.

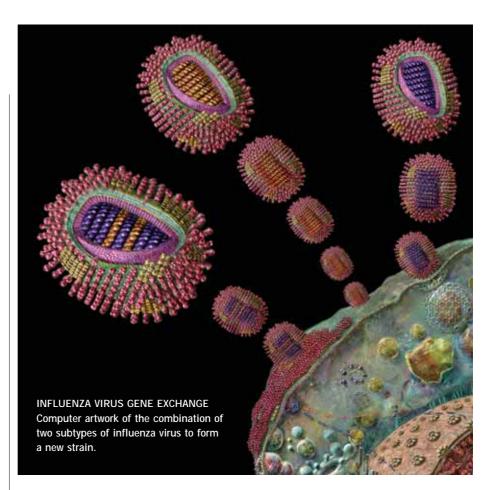
The fourth top spot—associate director for cancer prevention and control—is

still vacant, but the director anticipates that it soon will be filled. "It will encompass community outreach, which is key to this enterprise," he says. Since this is a top priority, the entire leadership team shares involvement in strategies to address health disparities. The final position is associate director for basic and translational research, which Ozer is filling on an interim basis.

Ozer, who came to UMDNJ in 1988, graduated cum laude from Harvard College, and earned his MD from Stanford Medical School. While a student he did research in genetics and spent a year as a visiting research fellow at the Institute for Tumor Biology at the Karolinska Institute in Stockholm, Sweden. His career also includes positions in the U.S. Public Health Service, the NIH, the Worcester Foundation of Experimental Biology, the University of Massachusetts School of Medicine, Hunter College and the Graduate Center of CUNY. He has held visiting appointments at the Weitzman Institute in Israel and The Johns Hopkins School of Medicine.

Ozer's career at UMDNJ has included serving as chair of the NJMS Department of Microbiology and Molecular Genetics, where he remains a professor, and as senior associate dean for research at the medical school. His research on molecular mechanisms of carcinogenesis and of aging has been continuously funded by the NIH for more than 30 years. As a recognized expert in his field, he has served on multiple NIH and foundation training and research review panels, as well as on editorial boards of scientific journals and advisory committees to academic programs.

The NJMS-UH Cancer Center moves forward toward its much-anticipated opening and promises to positively transform the landscape of cancer care in north Jersey. —EVE JACOBS



Bird Flu Update

HERE is an ambulance parked at Newark Airport and staffed by UMDNJ–University Hospital (UH) paramedics and emergency medical technicians (EMTs) 24 hours a day, seven days a week. If someone suffering from the highly pathogenic bird flu (H5N1) lands there, this crew will bring the victim to UH. According to Lawrence D. Budnick, MD, an NJMS associate professor of medicine, if this deadly Type A *Orthomyxoviridae*, which originated in Asia and killed its first human in 1997, arrives in New Jersey, UH is ready.

"Our plan is similar to the one we tested for the potential arrival of SARS and we've conducted exercises." Budnick also reports that in late October, the Centers for Disease Control and Prevention (CDC) opened a quarantine station at the airport with full time personnel to monitor incoming travelers.

Travelers showing symptoms of the flu will be separated from others, isolated and evaluated.

UH's 53-page "Avian Influenza A (H5N1) Preparedness Plan," whose chief architects are epidemiologist BeverlyAnn Collins, RN, MS, CIC, UH's director of infection control, and Rajendra Kapila, MD, chair of the UH infection control committee and a NJMS associate professor in the Department of Medicine, carefully spells out each step personnel will take.

Like a new character in what could be a historically frightening battle, this H5N1 strain of the avian flu, which has since shown up in Russia and Turkey, is holding the rapt attention of public health experts. World Health Organization (WHO) personnel worry because it resembles aspects of the pandemic "Spanish flu" virus of 1918 that quickly killed at least 40 million people. Virulent in domesticated birds, this flu has demonstrated the ability to jump to different species in a process known as

adaptive mutation. It has been found in poultry, mammals and, infrequently but more regularly since 2003, in humans who have had direct contact with an infected animal. Fortunately, at this point, human-to-human transmission of the H5N1 influenza virus has been inefficient and therefore an extremely rare occurrence. However, the WHO states that all Type A influenza viruses are "sloppy, capricious and promiscuous... and undergo constant stepwise changes in their genetic makeup."

Public health surveillance of H5N1 infection in domestic ducks in Asia is complicated because these birds carry and shed the virus but show no symptoms. Patterns of migratory birds are also being studied to see where H5N1 may likely appear next. Though atypical, human-to-human transmission has been observed and an estimated 60 people have died from this bird flu in Thailand, Vietnam, Cambodia and Indonesia.

While the current influenza vaccine does not offer protection against avian influenza infection, the UH plan underscores the value of everyone receiving a regular flu shot containing the seasonal influenza vaccine. All flu shots contain a mix of inactivated viruses in a recipe chosen annually in February by public health experts for its protection against strains of the dominant and circulating influenza in Asia. This year's trivalent dose includes Type A California 7/2004 H3N2, Type A New Caledonia H1N1 and Type B Shanghai 361/2002. There are no H5N1 antigens present in the current vaccine, but it may prevent co-infection in an individual with a current circulating human strain and the avian influenza virus. Thus, a regular flu shot could

stop the subsequent development of a virulent, genetically re-assorted H5N1 strain that would be easily transmissible among humans. If human to human transmission ever resulted, the new virus could spread epidemically.

"Fears about the bird flu are legitimate," says Peter Wenger, MD, associate professor in NJMS's Departments of Preventive Medicine and Community Health and Pediatrics. "The way we travel now makes it especially important to be prepared." Wenger believes that following the WHO's recommendations for surveillance, detection and response are critical. "Some people estimate that 10 percent of all young adults were killed in that 1918 epidemic."

What intrigues Wenger about the influenza virus is the fact that it is so predictable and yet unpredictable at the same time. "There is nothing definitive about the flu. You know it's going to

happen every year but you never know how bad it's

mean that it won't happen next year. The next pandemic could also be caused by a strain of flu that hasn't been around in awhile. We must plan more intelligently to prevent future outbreaks."

Vaccination against this pathogenic bird flu, in fact, offers a better line of defense than any prophylactic use of antiviral medications like Tamiflu (oseltamirvir), according to Wenger. While antivirals can shorten the duration of a regular flu, and in the case of bird flu, theoretically protect an individual, they are expensive and must be taken every day. "There may be a role for them but they are not truly viable options," Wenger believes. "There is not even a lot of evidence that Tamiflu will be effective in protecting whole populations of humans."

Amantadine or rimantadine, two other antivirals, are specifically ruled out in the UH preparedness plan because of the appearance of resistance to these antivirals in recent H5N1 isolates from

A regular flu shot could stop the subsequent development of a virulent, genetically re-assorted H5N1 strain that would be easily transmissible among humans.

going to be. The influenza virus mutates every year so the fear is always that we may end up with a completely novel flu being released into a naïve population. That can be explosive. Thankfully this bird flu doesn't spread well in humans at this time." Even poultry workers and those assigned to kill diseased birds rarely become infected.

Wenger sees the bird flu threat and media attention about a possible pandemic as useful. "Overall we have to look at our vaccine strategy for this and for a lot of other diseases. Just because bird flu doesn't arrive this year, doesn't

Asia. The CDC now has the full attention of the U.S. government for a 10-year-old, comprehensive influenza plan as well as the promise of \$7.1 billion. Clinical trials for an investigational version of a H5N1 vaccine are taking place. According to a report from the National Institute of Allergy and Infectious Disease, human testing in approximately 450 healthy adults between ages 18 and 64 is underway at UCLA, the University of Maryland School of Medicine and the University of Rochester School of Medicine and Dentistry. —MARYANN BRINLEY

On Call for Newark's Teenagers

WHEN Paulette D. Stanford, MD, was a child, her favorite toy was "The Invisible Man," that transparent, biologically-correct, plastic introduction to the organ systems and parts of a human body. "I would spend hours and hours putting that thing together and taking it apart, trying to understand the GI tract, cardiac function and everything," she recalls. "I always had a knack for science and in high school I took all the advanced courses in biology, chemistry and physics. I loved school, just loved it."

An only child who grew up in New York City, not only has this associate professor of pediatrics at New Jersey Medical School (NJMS) mastered those physical components of human anatomy and physiology, but along the way, she found her own special route into the minds and hearts of adolescents. As associate director of NJMS's Division of Adolescent and Young Adult Medicine (DAYAM),

Stanford, who is a NJMS alum, has been developing life-saving community out-reach programs and advocating for Newark's teenagers for more than 25 years. Co-author of *Strength for Their Journey, 5 Essential Disciplines African-American Parents Must Teach Their Children and Teens* (Random House), she knows these adolescents so well.

"Yes, some of these kids can seem a little threatening at first but if you get them in a room and just start talking one on one, you'll find that they are just like everyone else. They've been heartbroken. They've had a hard way to go in life. They may be angry with a mother or father who didn't pay any attention to them, who took drugs or whatever. You find out that there are a lot of nice kids out there who need some direction and somebody who cares about them."

Stanford is that somebody who cares. With approximately \$1 million in grant support, she laughs about how appear-

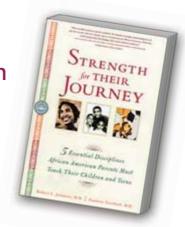
ances can frighten some adults away from adolescents. "My mother is 80 and I say to her, 'Mom, all teenagers aren't smoking, drinking, into crazy sex, taking drugs or causing violence." Impressions, especially those picked up from television or the media, can lie. Stanford and her codirector as well as co-author. Robert L. Johnson, MD, who is also interim dean of NJMS, smile about the type of teen who arrives in their offices, "the big guy wearing the baggy pants, huge shirt, sitting there, looking like he's part of a gang with the scarf around his head. You ask him, 'Are you sexually active?' and he answers quite truthfully, 'No.' Sometimes, what these kids have is just a look. Nothing more," she says.

Of course, many of the teenagers under her wing do have more than a look. They have serious problems. Perhaps Stanford's favorite program addressing these adolescent medical and social difficulties is the Spend Time On Prevention (STOP) program. "I love my STOP program. It was started back in 1996 to test teenagers in Newark for HIV/AIDS." With a van donated by the Red Cross, Stanford's team started going out into the community to check high risk teens on their own turf, even if that meant arriving in a tough neighborhood in downtown Newark. "The kids weren't coming in to us so we obtained state funds to go to where they hang out and live."

At first STOP focused only on

"There are a lot of nice kids out there who need some direction and somebody who cares about them."

Paulette D. Stanford, MD





HIV/AIDS testing but Stanford soon realized that expanding the goals only made sense for a community which needed help for other sexually-transmitted infections (STIs) as well as social and physical diseases. When the donated van eventually broke down and a new one was under discussion, Stanford even had the standard recreational vehicle, which usually comes with a back bedroom, "retro-fitted to include an examining table and a lamp so we could do pelvic exams right there, as well as pap tests and clinical breast exams."

Now, under STOP, trained, certified and bilingual counselors, a case manager and medical technicians teach, counsel and test for HIV/AIDS, syphilis, gonorrhea, chlamydia, pregnancy, breast cancer and high blood pressure. Funded by the Division of AIDS Prevention and

Control in the New Jersey Department of Health and Senior Services, a staff of nine is devoted to "prevention, education and care. We are right there in the community, discovering how many people have no health insurance, in fact, and how many are reluctant to come for treatment because of that. STOP is my baby and what I'm most proud of. Do you realize that we've had adolescents come onto the van who have as many as four to five sexually transmitted diseases?" All information about clients, test results and appointments is kept confidential and the STOP mobile unit also provides service at health fairs, on college campuses and during other community events.

As she speaks, Stanford is working on a grant to obtain funding for a full-time nurse practitioner to do more obstetrical/gynecological exams on the van.
"Look at this paperwork," she says. "I have mountains of it and so many deadlines. But we can double the number of screenings if we have someone fully devoted to this."

Also on her desktop are pamphlets explaining other DAYAM endeavors. There are so many that it's easy to see why Stanford is a whirlwind of positive energy. She needs all of it to keep up with POWER (Peer Outreach Workers Educating Risk Takers), START (Screening Treatment and Risk Reduction for Teens), BHI (Brotherhood Health Initiative), YFP (Young Fathers Program), STAY (Support and Treatment for Adolescents and Young Adults), MSSP (Male Student Support Program), STAND (Services Targeting Adolescent/Young Adults Needing Direct Outreach), JUMP (Juveniles Understanding Methods of Protection) and PCM (Prevention Case Management).

The newest DAYAM initiative is VOICES. "We just received funding to develop this one after seeing how successful it was for African-American young people in other urban areas, including New York City." What VOICES will do is bring kids in from a particular neighborhood for a session where they'll learn about contraceptives, including condoms, and how to negotiate their use. This program will also teach teens how to talk about condoms with a partner and deal with someone possibly prone to violence during such a discussion. She's also looking for funding for her FEMEX (Female Examinations) program, which offers all sorts of gynecological care and is oriented to young women. "That one makes me happy, too," she says.

Much of what Stanford does professionally makes her happy. In fact, it's hard to imagine that she didn't find her way into this medical specialty right out of college. The mother of a grown daughter—who is now a lawyer—

Stanford had actually been working toward a Master's /PhD degree in microbiology at Rutgers University's Cook College of Agriculture before wandering into medicine. After graduating from City College in New York City with a concentration in marine biology, she realized that jobs were going to be scarce and soon followed her love of science into microbiology. "Though I had obtained a Rutgers fellowship for this program, I decided after awhile that agriculture wasn't for me. I was a city girl and betwixt and between at that point in my life." When a friend applied to medical school, she followed suit and soon realized, "This is definitely what I was meant to do." Later, during her first rotation in internal medicine, caring for a 17-yearold patient convinced her that adolescent pediatrics was where she wanted to spend her time.

Back then, pediatricians did not care for patients older than 13 at Martland Hospital (the original teaching hospital on the Newark campus). She explains, "Here was this young girl who had contracted rheumatic fever and was very sick. She had damaged one of her heart valves, needed to be hospitalized for months and had been put on an adult floor. Multiple

medical residents and attending physicians—so many of them were male physicians—would come to her bedside to examine her every day and make her open

her gown. She was very sensitive to this care and would become upset." Stanford, who had been assigned as the medical student on the team, stepped in and knew how to calm her. "We would talk. She had just gotten into Rutgers and was going to miss entering as a freshman. She had also broken up with her boyfriend and felt as if the whole world was coming down on top of her."

The young clinician in Stanford liked the medical part of taking care of this teenage patient but also relished the emotional caretaking. "I liked the psychoemotional dynamics," Stanford recalls. "That's when I decided to specialize in this area of pediatrics, to read everything I could and to learn all about adolescent psychology." At UH, teenage patients were soon being sent to the young Dr. Stanford. Though there were few formal



training programs in existence then, after finishing her pediatric residency at UH, she spent a month caring for teenagers at New York City's Montefiore Hospital. On her return to NJMS, she became the first fellow in adolescent medicine under Johnson.

"I would love to establish an adolescent health center here at UMDNJ," she says. Limitations on physical space keep Stanford from venturing into additional medical and social missions. In particular, she mentions the critical need to address nutrition and obesity concerns in the urban community. "We get calls for this expertise all the time," she explains. "There are so many overweight African-American teenagers." Meanwhile, her staff is spread out on campus and in different buildings. Yet, one thing is certain: she's definitely in the right place. "What I love most about working at UMDNJ is that I'm here physically in Newark, where there are great needs for improvement in healthcare. This University, and all of us who work here, really are Newark's champions."

- MARYANN BRINLEY



SMART Program Wins More Than \$1 Million

ATHYANN Duncan, MD, an assistant professor in the NJMS
Department of Family Medicine, got the call from her department chair, Mark S. Johnson, MD, MPH, at 3 a.m. He had just received word of their success. The SMART educational enrichment program, designed to support urban minority students in 8th through 12th grades in science and mathematics while encouraging them to continue on into

medicine, science and healthcare careers, had won \$1,329,664 from the National Institutes of Health in a Science Education Partnership Award. In fact, this program, hosted by NJMS, had received more money than any of the other eight national grants announced in October, including projects at Yale and Harvard. As Johnson says, "People just don't drop that much money in your hands without your getting excited."

Johnson is the principal investigator on this five-year grant. Duncan, a former high school teacher, is the project director. Original funding from the Howard Hughes Institute had run out and while support had been pieced together from other foundations, "In order for us to sustain the program at the level we wanted, we knew we had to find a large grant," Johnson says.

Science proficiency among black and Hispanic students ranks far below white children, SMART (Science, Medicine And Related Topics), which was initiated on the Newark campus more than 10 years ago by retired NJMS professor Ophelia Gona, PhD, makes it "cool to be smart," as Johnson says. "These kids are coming from social structures where they have little motivation to succeed in school." Through their participation in SMART—and some students go all the way through, beginning in 8th grade and continuing until high school graduation—"you can see a real cultural reversal where the level of competition and the interest in doing well academically both increase." As a result of the NIH grant, an additional 125 new students are expected to be recruited, up from last year's group of 150. Duncan says, "Our retention rate is really good. Though a few may drop out, we have several children who have been coming for five years and have now been accepted into the Montclair State University MD/BS college program," a joint degree awarded in conjunction with NJMS.

The new funds will help SMART "throw a wider net," as Johnson says, "building a pipeline" into careers in biological science, research and the health professions. "The further you take that pipeline back into children's lives, the more likely you are to keep their interest." He'd like to reach back as early as 3rd grade with SMART curricula geared to elementary levels. SMART classes are conducted at the medical school as well

as at St. James **Preparatory School** on Shipman Street, where the Department of Family Medicine operates a local health center. Winter sessions are held on Saturdays, beginning in January and culminating in a Science Fair at the end of March. Summer classes, taught by a cadre of teachers recruited from across the state as well as NJMS medical students, run on weekdays for four to seven weeks, depending on the child's age. "It's pretty amazing to come in here on a Saturday morning and find more than 80 kids working hard on science

SMART focuses on anatomy, pathophysiology, epidemiology, genetics, behavior, pharmacology and research, as well as mathematical applications. The NIH award will provide for new curricula and will focus clinically on major diseases affecting minority populations such as obesity, cancer (prevention), asthma, hypertension and coronary heart disease.

projects," Johnson remarks.

Last year, from 9 a.m. to 3 p.m., summer school took 8th graders on a Biotrek to explore human biology, covering topics such as body systems, muscles and bones, the physics of motion, respiration and injury prevention. Ninth graders were challenged to undertake a Fantastic Voyage of scientific discovery through flight, sound, circulatory systems, growth rates, ratios and proportions, as well as tables and graphs. In Enviroquest, 10th grade classes connected health, science and the environment. In 11th grade, the children learned what becoming a health professional involves. Traditionally, the senior year's Biomedical and Health/ Advanced Placement Sciences Research

Apprenticeships run the longest at seven weeks and also prepare students for college with SAT prep counseling, campus tours and lectures by health related professionals. "Each class has several teachers," Duncan explains. "Every week there is also a field trip."

Duncan and Johnson also run another program called SERM (Summer Experiences in Research for Minorities) that allows SMART students to participate at a higher level, as freshmen in college. Last year, the two physicians accompanied

eight members of that older group all the way to Hawaii where the students presented their research findings in a national competition. "We didn't win but the year before our students received two first place awards," she says.

Professional development for teachers, as well as workshops for parents, have also been a critical part of the SMART format. High school and middle school teachers, for instance, can earn professional development credits participating in SMART seminars and internships. "It's particularly important to get parents, many of whom have not gone to college, involved and supportive of their children's educations," Johnson explains.

Besides their plans to publish the results of SMART in professional journals, Johnson and Duncan expect to share their curriculum innovations with other recipients in a March meeting of all NIH winners. They are also creating a database so they can follow these students throughout their careers for long-term evaluation. —MARYANN BRINLEY

The "Masters" Among Us

The UMDNJ Master Educators Guild was founded in 1999 to recognize those who "set the highest standards of academic excellence and have a true gift for teaching." Each year, 10 to 12 faculty members are elected to join the group and are inducted into the Guild during University Day ceremonies. Of the 2005 inductees, five hold appointments at NJMS: Stephen Baker, MD, professor and chair, radiology; Henry M. Edinger, PhD, JD, professor, physiology and pharmacology, and director, Office of Medical Ethics and Law; Bart Holland, PhD, MPH, associate professor, preventive medicine and community health; Carol S. Newlon, PhD, professor and chair, microbiology and molecular genetics; and Pranela Rameshwar, PhD, associate professor, medicine-hematology/oncology. ■ The qualities that make these teachers "masters" are evident in the following profiles of two of the new inductees.

Meet the Man Who Actually Likes Statistics

THE world of statistics is pretty dry for those not enamored of numerical data. So, it may take a "master educator" to win over the frustrated, the skeptical and the extraordinarily busy. Since most medical students fall into one or more of those categories, a teacher like Bart Holland has no time to rest on his laurels. His students owe a wee bit of thanks to Bronx High School of Science, where Holland says the message conveyed at all levels was that "science and research are not worth much unless you can communicate what you're doing to someone else." The

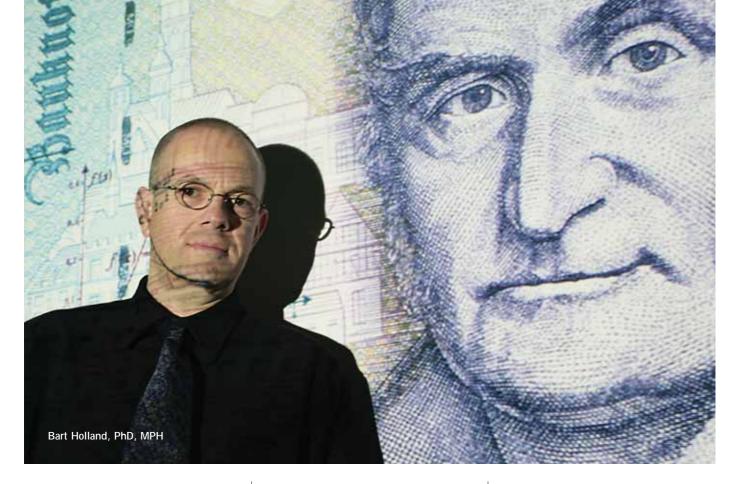
school had its own peer-reviewed and indexed journal, completely written and edited by students, and an excellent debating team and English courses, he says. The science curriculum was strong, but Holland also learned the lesson that would guide his professional life: "Technical skill alone does not a good scientist make."

Holland graduated from Columbia College in 1977 with a major in anthropology and went on to Columbia's Mailman School of Public Health, looking to do "something scientifically important," but not quite sure what that would be. It was there that he encountered biostatistics. "I kind of fell into it," he says.

"Looking back, I can see a reasonable path and a reasonable outcome," he states, although that path was not immediately clear. He earned an MPH from Columbia in '79.

Luck played its part, according to the statistician, as did "very good mentoring." Despite Holland not having a math background, the head of biostatistics at Columbia recognized his talents and "encouraged me and gave me very good career advice. I also learned the importance of mentoring."

Part of that advice was pointing the way to Princeton University's Office of Population Research, where Holland studied population-based statistics. Explaining what that means, he says:



"It's learning a set of statistical techniques for examining phenomena that occur in large groups of people.

"Whether you marry, whether you commit suicide or come down with a particular disease is a personal, individual matter," he continues. "But you can zoom back from the individual and look at the population.

"The number of people marrying, committing suicide, contracting a disease—plus or minus a few, which can also be predicted—will stay the same year to year," he explains. "If the numbers change, there must be a cause." Statistical techniques can then be used to better understand why two populations differ in rates of a particular disease, for instance, he states.

After earning his doctorate, Holland worked for the pharmaceutical industry for two years. Following this stint in corporate America, he set his sights on academia, where he could conduct his own research and teach. He started at NJMS in 1985. "My first experience teaching was a course in biostatistics and epidemiology for medical students," he remem-

bers. "I realized I could have fun with it—figuring out how to communicate statistical concepts in plain English."

Holland has continued teaching this course. He uses such creative "teaching tools" as loaded dice and two-headed coins when he discusses probability. "If you toss a coin 10 times and each time it comes up heads, who is to say that it couldn't come up tails on your next 10 throws? There is some uncertainty," he says.

He likens the coin-question to the testing of drugs. "Where do you draw the line on the number of people in the test group?" he asks.

Holland's own research has focused on that question. How do you estimate the sample size that you'll need for certain tests to be valid? There is a "right size" for a sample group in a clinical trial, he explains, "large enough to establish a difference between the test group and the controls, but not too large. You have to specify the number of people before testing."

Statistics is a course required of all medical students, so all NJMS medical

students for the last two decades have encountered Holland—and his "much valued" co-instructor Marian Passannante, PhD. "When a subject has a reputation for being dry, as statistics does, you need to spice it up," he says. Humor and energy are two of his trademarks in the classroom.

"In our class, students get involved in the demonstrations—measuring, counting, giving verbal 'bets' on an outcome, doing something," he explains. He also uses technology liberally to keep the course lively.

"You have to show the students that the material has practical value," he continues. "They will be reading articles for their entire careers. Understanding statistics is valuable."

Holland also teaches "study design" at UMDNJ-School of Public Health. How to make an experiment statistically valid; sample size; sample selection; how to recruit people into a trial without biasing the selection; and what to do when people drop out are just some of the topics he covers.

So what does a "master educator" do

when he's not teaching? Write books, of course! After he published an article—promoting rigorous clinical trials of claims of herbal medicine—in *Nature*, Holland was approached by The Johns Hopkins University Press to write a book. *Probability Without Equations* was the result. The book is a tool to help physicians understand biostatistics, he says.

If there's any question in your mind about just how successful a writer he is, visit Amazon.com and scan their "Top 10 Popular Math Books for 2002." Holland's What are the Chances? Voodoo Deaths, Office Gossip and Other Adventures in Probability was the number 9 seller of the year in that category. Apparently, he has quite a knack for explaining probability and its effect on everyday life—this time to a general audience—in a lively and non-threatening way. Not only was it positively reviewed in the New York Review of Books, but it was translated into Japanese in 2004. The Korean version is due out soon.

His most recent ventures into the world of publishing have tested his language fluency. In 2004 his English language translation of *Debunked! ESP, Telekinesis and Other Pseudoscience* by French author and Nobel laureate Georges Charpak hit the bookstores, and in April 2006, his translation of a French history of epidemics and how they've been controlled over time will be released.

So what was the probability that Bart Holland, born, bred and educated in New York and now an associate professor of biostatistics and epidemiology in the NJMS Department of Preventive Medicine and Community Health, would become a Master Educator, statistics guru and popular author? Only "the Master" can tell us for sure!

-EVE JACOBS

Who Says Science Is Not a Woman's World?

AROL Newlon, PhD, began her graduate studies at MIT before it was a popular stomping ground for women. Did she ever consider that her life there—and in the academic scientific community thereafter—might be fraught with hurdles? Not for a moment. Did she encounter any resistance in her steady advance through the ranks of academia to become chair of the Department of Microbiology and Molecular Genetics at New Jersey Medical School? Very little.

Newlon came from a family with generations of physicians and ministers on her mother's side, and academics on her father's side, so being a professional woman was just not an issue. She liked biology, was good at science and never considered another field. She grew up in Florida, attended the University of Florida in Gainesville, and when senior year rolled around, decided that she would rather earn a doctorate in biology than practice medicine, so that is what she did.

She applied to programs at Harvard, Yale, MIT, Michigan and California Institute of Technology, and was accepted at the first four. But the then-chair at Cal Tech—when she asked for an application—wrote saying he'd had bad luck with female students in the program, but if she thought she was tough enough to make it, she should write back.

She was tough enough, but also smart enough not to tango with a shortsighted partner. Newlon chose MIT, where she specialized in cell biology and finished her PhD in five and a half years. "The environment was good," she says. "Actually my class was half women, but before that, there were few women. It was the Vietnam War time and a lot of

men were being drafted. After the experience with the women in my class, MIT never looked back."

Newlon met her husband in graduate school. They were in the same department and shared a love of bird watching.

They moved on to do post-graduate work in the Department of Genetics at the University of Washington, where Newlon was mentored by Walt Fangman, a well-known researcher in the field of yeast biology. (Newlon has focused her investigations on DNA replication in yeast and has also made her mark in this field.) After two years there, she went looking for work.

She was hired by the University of Iowa, and it was during her initial year there—in 1974—that she received her first NIH grant. It was also where she learned to be a "master educator."

"I was assigned to teach the intro to biology course for someone on sabbatical," she says. "There were 625 students and 25 lab sections."

She presented three lectures a week and it took her a day and half to write each lecture. "At the end of the semester, I left for a vacation on Lake Michigan and slept 20 hours a day for three days straight," she remembers.

Having survived that, she says "nothing has ever been that bad. But it taught me that I could do it."

During her 10 years in Iowa, she realized that she loved teaching. "It's gratifying to communicate information and your love for a field to students. For me, and most teachers, the most intellectually satisfying aspect of teaching is being able to develop a course based on your own philosophy. You mold a subject into a series of lectures that make sense to you."



How was she perceived by students? "Tough but fair," she says. "My standards are high, but I realized students appreciate the challenge involved in doing something well that is demanding."

Her research progressed as well, and her grant was renewed twice during her time there. But in 1984, "it was clear we needed to get to a place with more opportunities," she says.

And opportunity came knocking. After giving a seminar at NJMS, she was invited to apply for a faculty position. "I knew that coming here would put me in a department with several people working on yeast and DNA metabolism—a better intellectual situation," she explains.

She also points out that "there was not a single female faculty member in basic sciences in the medical school in Iowa and only one other woman on the faculty of my department."

Her husband Mike, too, was looking for a new venue, and found it at UMDNJ-Robert Wood Johnson Medical School, where "he directs two courses and teaches in several other courses in my sister department there," she states.

NJMS turned out to be "very different from Iowa. The teaching load is lighter,"

she says and the environment allows for real growth.

"We've developed a culture of teaching here," she says. "When the department was preparing to launch a new course, we worked together, attending each other's lectures, picking up threads from topics that the others discussed in class and weaving them into the lectures, as well as referring to concepts that would be presented in upcoming classes."

Newlon is proud of her role on the steering committee for the Jubilee Curriculum at NJMS, launched just last year. "This is a major undertaking aimed at integrating courses and placing much more of an emphasis on small group activities," she says.

She explains that first-year medical students take The Physician's Core, which includes medical ethics, communications, cultural competency and learning to take histories and perform physicals. This course also sends them into physicians' offices to spend a half day each week. "They will understand the clinical relevance of what they're studying in the basic science curriculum, which was not there before," she explains. "There is also a significant decrease in lecture hours and an increase in small

group interactive teaching in the first two years."

The third year will be introduced next fall. "We'll integrate times for the students to return to the basic sciences during the clinical years," she explains. "For instance, during the infectious disease rotation, students will return to microbiology and immunology. During surgery, they'll return to anatomy."

Why does she think she was nominated to be a member of UMDNJ's Master Educators Guild? "I think it was on the basis of my mentoring," she answers.

Opportunities for mentoring are frequent in her role as chair of the department. "It's why I threw my hat in the ring for the position," she continues. "Recruiting and mentoring new faculty give me the opportunity to build a legacy beyond my science. That's the challenging part of the job."

What keeps her motivated after all these years? "The research—we're still doing some pretty interesting stuff," she says. "With the new Cancer Center going up, the first on campus student housing and other buildings, it's an exciting time to be here."

Newlon also wants to build up her department. After recruiting two faculty members last year, she has set her sights on hiring five more and "getting them well on their way to making careers."

When "other people come along to assume leadership positions, bringing in new blood and new ideas," she would like to step back from the fray to devote more time to travel, reading and watching birds.

But this is no retiring person. Five years down the road, no one who knows her will be surprised to hear that Carol Newlon, researcher, Master Educator, mentor, chair, and certainly role model for women in science and academia, still has her hand on the mast and is ever-so-steadily setting sail for a new adventure.

-EVE JACOBS

Mentoring Gives Future Neuroscientist A Head Start

Sussan Salas took a philosophical approach to becoming a doctor, literally. Even though she knew she wanted to practice medicine from a very young age, Salas studied philosophy as an undergraduate at Duke University because she wished to be a well-rounded physician. This seemingly practical approach to her career belies the passion Salas demonstrates for medicine and her chosen specialty—neurosurgery—but it is this combination of planning and passion that led to her nomination as an American Medical Association Minority Scholar for 2005.

One of just 10 medical students selected nationwide, Salas is the second NJMS student to win this prestigious award. (Charles Javier Jordan won in 2004, the first year of the program.) Each of the country's 125 medical schools can nominate up to two students for the distinction, which includes a \$10,000 award.

When Salas began her medical education in 2003 at NJMS, she brought with her a solid grounding in medical science, thanks to a two-year post-baccalaureate program she took at Duquesne University in Pittsburgh from 2000 to 2002, as well as substantial research and clinical experience.

While an undergraduate, Salas devoted time to clinical activities with the Wake (NC) County Public Health Department, running an evening health clinic for migrant farm workers. On the research front, she studied the effects of drugs on the sense of taste at Duke's

Taste and Smell Laboratory. In 2002 – 2003, she worked as a biochemistry laboratory assistant at the UCLA School of Medicine, where she studied prostate cancer gene expression in mice. Parlaying her fluency in Spanish—Salas is a native of Peru—she volunteered as a translator in several Los Angeles emergency rooms and on a medical mission to Peru.

But it was a class in neuroscience at Duquesne that defined her ultimate career goals.

"The brain is a fascinating part of the human body," she states. "Trying to figure its inner workings is both challenging and exciting." Salas forgets everything else when she is in the operating room observing a procedure. "Twelve hours go by in a flash," she admits.

The ability to make a difference also resonates with Salas. "A doctor's intent is to help, but a neurosurgeon can do this in a big way. You can enable a child to walk again. You can bring someone back from a comatose state to rejoin their families. Talk about making a difference in people's lives!"

Her passion for the field inspired her to join the NJMS Student Interest Group in Neurology/Neurosurgery (SIGN) as a first-year student. That year, she won a Medical Student Scholarship from the American Academy of Neurology to attend the group's annual meeting. She returned with many new ideas that she implemented as SIGN's president the next year. The accomplishment of which she

is most proud is the creation of a mentorship program which provides students with shadowing opportunities with neurologists or neurosurgeons as early as their first year. The program also offers students early exposure to the field, helping them make informed decisions about residency programs.

Her own mentor, Michael Schulder, MD, professor and vice chair of the school's Department of Neurological Surgery, shares her passion. He says, "During medical school I was interested in the brain and thought surgery was great. Neurosurgery combined them both. To me, clearly, this was the best job anyone could do."

Schulder learned well from his own mentor at Columbia University College of Physicians and Surgeons, Peter Carmel, MD, who now chairs the neurological surgery department. Schulder's passion for advancing the field led him to a new concept, the idea of performing surgery guided by real-time MRI scans. He introduced the PoleStar MRI system to the University Hospital OR in 2000. This device is built around a movable magnet that can be used during surgery to pinpoint positions in the brain.

"It is a well-known phenomenon that the brain shifts during surgery, making pre-operative MRI scans inaccurate," says Schulder. "Using the Polestar N-20 helps us to be more precise in removing tumors of the brain and skull base, performing biopsies and managing hydrocephalus."

Bringing this new technology to the school was a no-brainer, he says, half



joking. "Once there is technology that can improve our ability to help people, it is absolutely incumbent upon us to use it," he explains. UMDNJ–University Hospital was the first hospital in the Western Hemisphere, and only the second in the world, to acquire the machine. Today approximately 35 are in use, 25 of them in the U.S.

The opportunity to learn about such cutting-edge technology fascinated Salas, and she worked with Schulder during the 2004 Cancer Summer Student Research Program on a project titled "Stereotactic Accuracy of a Compact Intraoperative MRI System." The research findings, which won first place in the summer program, were also

accepted for publication in the *Journal* of *Neurosurgery*, the discipline's premier journal; Salas is the second author.

Maria Soto-Greene, MD, Vice Dean for NJMS and the director of the Hispanic Center of Excellence, is especially pleased with Salas' success. "When Sussan's candidacy for medical school was brought to my attention, I recognized that she was a person who would thrive here. Our hope is to provide students like Sussan with the opportunities to stretch beyond their boundaries."

Soto-Greene also notes Salas is well-poised to pursue a dual career as a clinician and an educator. "The number of Hispanic faculty in the nation's medical schools is quite low," says Soto-Greene.

"Within the field of neurology/neurosurgery, that number is even lower."

On the prospect of teaching, Salas says, "I am certainly considering it. I have had great mentors at NJMS and would like to give the same opportunity to someone." But first, she needs to focus on her clinical rotations and then a seven-year residency program.

Despite her many medical achievements, Salas doesn't seem to have strayed too far from her undergraduate grounding in philosophy when she sums up her own outlook on life. "You only live once so you better do what you love. Otherwise, life will pass along and you'll wonder where it went."

-MELISSA CAMPBELL

Surveying A New Landscape

SINCE 9/11, we've added a new word to our vocabulary: *preparedness*. At first, it related to terrorism: being ready in the event of an attack, whether it is from biological, chemical, radiological, nuclear or explosive agents. Following the recent onslaught of hurricanes, tornadoes, earthquakes and mudslides, preparedness has taken on new meaning. It's expecting the unexpected—and learning to deal with it.

Patricia Fleming, PhD, MS, heads up the New Jersey Preparedness Training Consortium (NJ–PTC), a statewide partnership whose purpose is to train include UMDNJ, Rutgers University, and other state agencies and healthcare systems. (For a complete list of consortium members, see the box on page 17.)

"The training stresses personal as well as professional preparedness," explains Fleming, who is also a professor of preventive medicine and community health at New Jersey Medical School (NJMS). "We are better prepared to respond as part of a community if we have our own preparedness plan in place. It's like when you're told about the oxygen masks on an airplane. You put on your own mask first, so that you can help someone else."

health department. She and her husband Lorin still had a home in Scotch Plains, so they moved back in, along with their cadre of dogs. (The couple are the proud "parents" of seven miniature pinschers.)

Fleming's introduction to NJMS was facilitated by fellow Johns Hopkins alum Marian Passannante, PhD, an associate professor of preventive medicine and community health. Passanante put her in touch with William Halperin, MD, DrPH, chair of preventive medicine and community health, and like Fleming, a CDC alum.



"We are better prepared to respond as part of a community if we have our own preparedness plan in place. It's like when you're told about the oxygen masks on an airplane. You put on your own mask first, so that you can help someone else."

healthcare workers to respond to serious emergencies. It's a challenge for a woman who doesn't shy away from them.

NJ-PTC is funded by a \$4.5 million, three-year grant from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA). Major players Fleming, a native of Scotch Plains, came to NJMS in June 2005. She'd spent 16 years at the CDC in Atlanta, where she developed standards and guidelines for monitoring the HIV/AIDS epidemic and directed the national surveillance program. In 2003, she transferred to the CDC's office in Trenton, serving as a liaison to the state

"It seemed like a good fit, so I proposed to him!" she jokes.

It has turned out to be a very good fit. Together, Fleming and Halperin wrote the grant proposal for NJ-PTC and put together the consortium. "HRSA was looking for close relationships between grant recipients and the health department and strong links

MEMBERS NJ-PTC

UMDNJ

Rutgers, The State University of New Jersey
College of Nursing, Ernest Mario School of Pharmacy, School of Social Work

St. Barnabas HealthCare System

Liberty HealthCare System Inc.

New Jersey Department of Health and Senior Services

New Jersey Primary Care Association

New Jersey Hospital Association

among academic, hospital and first responder communities," says Fleming. "That described us to a T. It was a competitive grant, so we were quite happy to receive the funding." Fleming and Halperin are co-leaders of the project.

NJ-PTC offers a variety of training courses throughout the state for physicians, nurses, dentists, pharmacists, EMTs, mental health professionals and other healthcare providers. The consortium meets every other month to plan curriculum and review emerging topics of interest. Their website (www.njptc.org) includes a listing of courses, conferences, workshops, drills and other educational materials. Courses are "face to face," video and web-based, and cover a variety of scenarios: everything from biological and chemical agents to natural disasters. Psychosocial aspects of bioterrorism for nurses, working dogs and disaster response, uncovering myths and fallacies about terrorism, and an update for dental healthcare providers are just a few of the many offerings.

Drills and exercises simulate "realtime" disasters: for example, "New Jersey Hospitals Prepare for a Bioterrorism Attack." The incidents unfold gradually, just as they do in real life.

"At the CDC, we turned disease outbreaks into learning exercises," she adds. "You analyze everything. What was done? And what more can we do?"

Thus far, NJ-PTC has trained more than 10,000 healthcare workers, many of whom received continuing education credits. A preparedness certificate program is currently in the works.

At NJMS, the researcher has also



returned to her first love: the classroom. She is teaching MD and MPH students at NJMS and UMDNJ-School of Public Health. One of her courses is an MMWR seminar, based on the "Morbidity and Mortality Weekly Report" published by the CDC. It covers all issues of public health and data collection.

"The CDC has great cachet in the world of public health, and the students and faculty want to know more about it," she says. "My being here gives students a look at a different career track." She adds that one of the advantages of working in government is that you can

clearly see the link between research and policy. "Without making that link, you miss an opportunity to have an impact on public health."

"We've been faced with so many situations, from 9/11 and anthrax to hurricanes," she adds. "In any disaster, the response has to come at the local and state levels. Post-Katrina, we've had a wake-up call. We were not prepared. The whole country saw the disarray and lack of coordination at the government level. Now we're reviewing the lessons learned, so it doesn't happen again."

—MARY ANN LITTELL

PETER BYRON NEW JERSEY MEDICAL SCHOOL 17

NJMS Center for Humanism Opens

HE Healthcare **Foundation Center** for Humanism and Medicine at New Jersey Medical School held its formal dedication on November 2. Established in 2004 with a \$3.2 million grant from The Healthcare Foundation of New Jersey, the Center promotes dignity and respect for the individual, commitment to the



relief of suffering and the delivery of care that is kind, just and humble. The Center, located in the Medical Science Building, includes a sitting area, library, two work stations and a conference room. Dorian Wilson, MD, assistant professor of surgery, is the director. It is the only endowed center of its kind among the country's 125 medical schools.

In recognition of the person who inspired the creation of the humanism center, George Heinrich, MD, NJMS's associate dean for admissions and vice chair and chief executive officer of the Foundation of UMDNJ, recognized Lester Lieberman, chair of The Healthcare Foundation of New Jersey, with a plaque citing his "vision, support and dedication in guiding the future of healthcare."

Here are brief profiles of the current Humanism Scholars.

CLASS OF 2008

Shante Aris-Williams

A biology major, Africana studies minor at Rutgers University. Hobbies include reading, dancing and cooking. Says: "To me, the Humanism Center is about learning how to make connections with people that will leave lasting impressions on their lives."

Neil Fernandes

Majored in economics and minored in

biology at Columbia; had a first career as an investment banker

on Wall Street. Says: "For the first time in my life, I truly love what I am doing."

Gopal Patel

A native of North Bergen; graduated from Stevens Institute of Technology. Is a co-student director of

SHARE, a student-run community service group. Enjoys tennis, movies, and being an uncle to three nieces and nephews. Says: "Early on, I realized my joy in working with people, caring for them and, most importantly, learning from them."

Roger Rivera

From Clifton; majored in cell biology and neuroscience, graduating with high honors from Rutgers College. Plans a career in pediatrics with a specialty in infectious disease. Interests: football, poker. Says: "Being humanistic is just as important as being competent."

CLASS OF 2009

Sonia Belliappa

A West Caldwell native; graduated from The College of New Jersey. Interests: endocrinology, ophthalmology, reading and travel. Says: "Fostering compassion and respect in medicine is an important and worthwhile endeavor that I am honored to be a part of."

Jennifer Hughes

From Bridgewater; was a biology and art major at Carnegie Mellon. Interests: pediatrics, especially in developing countries; sculpture, painting and photography; outdoor sports. Says: "As a humanism scholar, I hope to serve as a role model for others."



David Seto Jung

Majored in psychology at Princeton; also has a certificate in Mandarin Chinese. Interests: Complementary and alternative medicine, foreign languages, singing, acting, table tennis. Says: "My knack for languages is rewarding because it allows me to connect with people."

Jennifer Koch

A Boonton native; studied psychological and brain sciences at Dartmouth. Interests: pediatrics, basketball, running marathons. Says: "The values of humanism—compassion, empathy, respect and kindness—are what initially drew me to medicine."

Seetha Maneyapanda

From Clifton; graduated from Princeton. Interested in pediatrics; enjoys movies and spending time with friends and family. Says: "I am grateful for the opportunity to be involved with the Humanism Center."

Jose Antonio Munoz

A native of Cuba; majored in biology and economics at Swarthmore. Says: "Despite the limited means in Cuba, doctors there are driven by the desire to serve. It is an honor and privilege for me to carry on this difficult but emotionally fulfilling mission."

Bharath Sathya

From Manalapan; a graduate of The College of New Jersey (TCNJ) and a biology major. He was accepted as a combined baccalaureate/MD program student, allowing him to matriculate at NJMS after his third year at TCNJ.

From left: Sonia Belliappa, Roger Rivera, Jennifer Hughes, Neil Fernandes, Seetha Maneyapanda, Shante Aris-Williams, Jose Antonio Munoz, Gopal Patel, David Seto Jung, Jennifer Koch, Bharath Sathya. Front: Dr. Dorian Wilson.



Familiar Faces in New Places

HE new face in the Dean's office at New Jersey Medical School (NJMS) is one that is highly recognized on campus. Robert L. Johnson, MD, FAAP, was appointed interim dean, effective September 1. A professor of pediatrics and psychiatry, director of the Division of Adolescent and Young Adult Medicine and a national leader in public health issues, Johnson graduated from NJMS in 1972 and, after a fellowship at New York University Medical Center, returned to Newark in 1976. The recipient of numerous grants from the National Institutes of Health, the Centers for Disease Control and Prevention, state and federal government as well as industry, foundations and community collaborations, he has researched and responded to numerous areas of adolescent health including HIV/AIDS, substance abuse and suicide. "I knew I wanted to be a doctor at age 9 and I still wake up excited about what I'm going to do each day," he says. In his new role, Johnson sees NJMS experiencing remarkable growth in criti-

est quality medical education, patient services and community outreach.

In another change of familiar staff, Maria L. Soto-Greene, MD, assumed her newest job as vice dean of NJMS on September 19, moving from UMDNJ Vice-President and Chief of Staff, a position she has held for the past year. Soto-Greene, a 1980 graduate of NJMS, has been with the Department of Medicine since 1983 and will remain as director of the NJMS Hispanic Center of Excellence.



TOP: JOHN EMERSON: BOTTOM: PETER BYRON NEW JERSEY MEDICAL SCHOOL

cal mission areas of providing the high-



CDC Violence Expert Speaks

THINK of the Centers for Disease Control and Prevention, or CDC, and what immediately comes to mind may be concerns about infectious diseases. Yet, for the last 12 years, this organization has tackled an even more widespread public health danger: family violence and, in particular, intimate partner violence (IPV). NJMS Interim Dean Robert L. Johnson, MD, who has spent his medical career reaching out to high-risk communities and families, believes that medicine "can't simply deal with this as an afterthought."

Each fall, the Dean's Distinguished Lecture at New Jersey Medical School brings the medical school community together to address pressing issues. On October 24th, a standing-room only crowd listened to guest speaker Ileana Arias, PhD, Director of the National Center for Injury Prevention and Control at the CDC, discuss the "Public Health Response to Intimate Partner Violence."

Arias, a clinical psychologist, believes, "This problem dwarfs any other public health issue we are facing today." Moreover, the CDC sees its role as one of "pushing and cajoling" others to build programs within communities to combat IPV. Not only are women being injured, but there are long-term mental and physical health consequences along with the hidden costs to children, families, employers and communities. Surveillance, research and implementation of programs are key to CDC's anti-violence mission.

Students Help Katrina Relief Effort

N the aftermath of a disaster, the natural inclination for most people is to do something to help. For medical students, that reaction is even more pronounced.

Shortly after the news of Hurricane Katrina's widespread devastation reached the airwaves, students at NJMS began mobilizing. Some 50 members of the school's many clubs and interest groups met and formed the Student Hurricane Katrina Relief Coalition. They planned a two-week sustained campaign that included a dinner and auction, a food drive, a karaoke night at a local restaurant and a game night on campus.

Student Heather Platt '08 described the experience as networking with a capital 'N.' She says, "Everyone knew someone who could help. There was no delegating, just doing. I guess that's what happens when you put a bunch of type-A people in a room together!"

When other campus-based clubs from New Jersey Dental School, the School of Public Health and the Graduate School of Biomedical Science joined in the effort, the coalition changed its name to the UMDNJ-Student Hurricane Katrina Relief Coalition.

The biggest event—the dinner and auction—drew more than 200 students,

staff and faculty. Some \$5,000 worth of donations from the UMDNJ and Newark communities were auctioned.

In all, the coalition raised \$10,000, which was donated to the American Red Cross Hurricane Katrina Relief Fund. They also collected 352 pounds of food for the Community Food Bank of New Jersey.

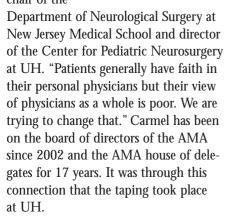
Equally important, a web-based, schoolwide forum was created to keep students informed about future events. "Now we can quickly and easily mobilize the student clubs and invite participation in future events, such as World AIDS Day," says Scott Cutro '08.

20 PULSE WINTER 2006 JON KRAUSE

Carmel Makes Television Appearance

RARLY one morning last spring, an entourage of 67 people in four trailers pulled up to the entrance to University Hospital (UH). Out stepped actors, camera operators, make-up artists, a director and producers to film a commercial for the American Medical Association's (AMA) "Everyday Hero"

advertising campaign. "The focus of this campaign is to remind patients that doctors are on their side," explains Peter Carmel, MD, professor and chair of the



The crew videotaped in empty areas

of the hospital and on the 8th floor of the Doctors Office Center. Carmel, who had just finished surgery, checked in on the filming. "The director saw that I was still in scrubs and said, 'You're in!'" he says. A close-up of Carmel can be seen in the 30-second commercial, which aired from September through

November during "CSI Miami," "20/20," "Grey's Anatomy," the "Today Show" and "Good Morning America" and appeared in many magazines including Newsweek, Parents and People. "This

campaign celebrates the caring and compassion of the medical profession and the heroic work that physicians do each and every day across this country," said Carmel. "The AMA is committed to helping doctors help patients."

Carmel, an internationally known neurosurgeon, specializes in brain tumors and congenital malformations in both children and adults and has been listed in several guides to outstanding physicians, including *American Health* magazine's "Best Doctors in America."

NJMS To Co-Sponsor Women's Forum

THE Hedwig van Ameringen
Executive Leadership in Academic
Medicine Program for Women (ELAM)
was formed in 1995 to develop senior
women faculty for top-level administrative positions in the nation's academic
health institutions. Each year, 45 fellows
are accepted into a highly competitive
one-year leadership training program
that also encompasses coaching, networking and mentoring opportunities.

In April 2006, NJMS will co-sponsor the ELAM Forum on Emerging Issues, the capstone event of the year-long program which brings ELAM fellows and their deans together.

NJMS is proud of its three ELAM fellows: Maria Soto-Greene, MD, vice dean and professor of medicine; Carol Newlon, PhD, professor and chair, Department of Microbiology and Molecular Genetics; and Nancy Connell, PhD, professor and vice chair for research, Department of Medicine, and director, The UMDNJ Center for BioDefense. ELAM alumnae come from nearly 90 percent of U.S. medical schools and half of U.S. dental schools.

Nominations for the 2006-07 class are now being accepted. Applications are available at www.drexel.edu/elam.

NJMS Dedicates Time Capsule

EW Jersey Medical School (NJMS) concluded a year-long celebration of its 50th Anniversary Campaign with the dedication of a time capsule, buried beneath the brick courtyard outside the entrance of the Medical Science Building on the Newark campus. The event, held on August 16, 2005, coincided with the school's annual White Coat Ceremony, an official welcome for first-year medical students.

A gift from the NJMS Alumni Association, the capsule lies under a granite marker. It contains a white coat, journal articles by faculty members, photos of the campus, university publications, textbooks, ID cards and parking hang tags. The capsule will be opened during the school's 100th anniversary in 2055.

"We hope the time capsule's contents will provide an impression of life at NJMS during the early years of the 21st century," says Alex S. Stagnaro-Green, MD, professor of medicine and associate dean for curriculum and faculty development.





A Potent Reminder on World AIDS Day

N Thursday, December 1, HIV positive children from Newark met "face-to-face" with their counterparts in Uganda. Through a live videoconference hosted by the Elizabeth Glaser Pediatric AIDS Foundation to mark World AIDS Day, the U.S. and African children presented poems and performances about their experiences growing up HIV positive.

In the U.S., researchers and clinicians have had major successes in treating HIV and preventing mother-to-child transmission of the virus. But there are still more than 1,900 children newly infected with HIV every day worldwide.

Cynthia McFadden, co-anchor of ABC News' "Nightline," moderated the event, which was held in the Rosemary Gellene Room of the NJMS Medical Science Building. Participants included: James Oleske, MD, Francois-Xavier Bagnoud Professor of Pediatrics at NJMS; Jake Glaser, spokesperson, and Suzie Zeegen, founding member, both of the Elizabeth Glaser Pediatric AIDS Foundation; and Philippa Musoke, MD, professor of pediatrics, Makerere University School of Medicine, Uganda. The "Caring Across Continents" event was sponsored by Johnson & Johnson.

On Monday, December 5th, three

student organizations held a lunchtime event at the medical school for World AIDS Day. At noon, Patricia Kloser, MD, an NJMS professor of medicine who specializes in treating HIV-infected women, delivered a lecture. Afterward, students constructed a human red ribbon in the medical school courtyard as a symbol of their commitment to HIV prevention and HIV/AIDS education.

The message of both events came out loud and clear: We still have a long way to go in the war against this deadly infection.



Kudos to Heary

Robert Heary, MD, was recently named chairman of the American Association of Neurological Surgeons/Congress of Neurological Surgeons Joint Section on Disorders of the Spine & Peripheral Nerves for 2005-2006. Commonly referred to as the "spine section," it is the third largest of the neurosurgical organizations. He is also the program committee chairman for the Cervical Spine Research Society, a multidisciplinary group dedicated to the study of disorders of the cervical spine.

22 PULSE WINTER 2006 TOP: PETER BYRON; BOTTOM: TED AXELROD



The Music of the Stars Benefits Autism

USICIAN Wynton Marsalis played his finest at a gala in mid-October to raise funds for autism programs at The Autism Center at New Jersey Medical School. Marsalis, whose 35-year-old brother is autistic, brought guests to their feet during his performance at the second annual benefit gala for the center. The event raised \$350,000 to support a range of clinical, research and community outreach services. The black-tie event, held at the New Jersey Performing Arts Center and sponsored by ING U.S. Financial Services, also honored Acting Governor Richard J. Codey for his support.

Swim, Bike, Run, Implant...

This Surgeon Does it All

HAT began as a dare when he turned 40 has now evolved into more than seven years of triathlon competitions for Jed Kwartler, MD, NJMS '83. The clinical associate professor in otolaryngology at New Jersey Medical School and UMDNJ-University Hospital surgeon joined top international Jewish athletes last summer in the 17th World Maccabiah Games in Israel. The quadrennial sporting event included more than 7,000 competitors and featured many famous alumni, including Olympic swimmers Mark Spitz and Lenny Krayzelberg.

"It was an experience of a lifetime," says Kwartler. "The Maccabiah is about excellence and achievement in sports. The most memorable event was seeing thousands of athletes marching into Ramat Gan Stadium—with 40,000 spectators—during the opening ceremony. Thousands of athletes from all over the world were competing against each other, yet felt a deep sense of camaraderie and were all proud to be in Israel."

Kwartler trains 14 hours a week with a triathlon coach and participates in half

a dozen competitions each year. He varies his training to fit his schedule, swimming one day and combining bicycle training and running the next. A recent competition in the U.S. included a swim/bike/run race that started in New York City and ended in Philadelphia.

The Maccabiah triathlon mirrored

Olympic distance competitions and included a 1.5 kilometer swim, 40 kilometer bicycle race and 10 kilometer run. Kwartler completed the race in two and a half hours and placed seventh in his age group. "Triathlons challenge you both physically and mentally, but always leave me with a sense of accomplishment and exhilaration when I

The two week trip to Israel was not just "all play" for Kwartler,

finish," he says.

Jed Kwartler, MD, at the Maccabiah Games

who specializes in ear surgery, including cochlear implants. Cochlear implants amplify sound for damaged or nonfunctioning parts of the inner ear. "It is the only technological device that can restore one of the human senses." explains Kwartler. He made a side trip to visit the director of the cochlear implantation program at Bnai Zion Medical Center in Haifa, Michal Luntz, MD, who he describes as the "queen of cochlear implants" in Israel. In addition to cochlear implantation, Luntz also researches inflammatory diseases of the middle ear and hearing restoration.

Kwartler found it to be a great learning experience. "The technology is the same, but length of hospital stay is much longer in Israel," he says. Cochlear implant patients stay in the hospital for follow-up care until they

recover, which is about a week." Kwartler has decided to add marathon running to his athletic resume and is currently training for his next race which takes place this spring—the New Jersey Marathon.

Compiled by Maryann Brinley, Melissa Campbell, Eve Jacobs, Mary Ann Littell, Jill Spotz and Carole Walker



The CHANGING FACE of OB/GYN

The doctors who deliver New Jersey's bouncing babies in 2010 may well look distinctly different from those who did that job just 10 years before. The OB/GYN specialty is in the midst of a major "face-change" that leaders in the field are analyzing and helping to shape. Why has this specialty begun growing new roots and flowering in unexpected ways? UMDNJ experts weigh in on the top issues impacting the profession.

It seems that across the country, the news stories are the same. Physicians in high-risk specialties can no longer afford the soaring cost of malpractice insurance. Obstetricians are among those hardest hit. Left with no other options, some are relocating to other states, limiting the types of patients they see or simply closing their practices.

The American Medical Association has designated 20 U.S. states as being in medical liability crisis, up from 12 in 2002. New Jersey is among them. A faculty/resident-run practice on UMDNJ's Newark campus, University OB/GYN Associates, has seen a tremendous increase in patients since it opened in 2003. Medical director Theodore Barrett, MD, associate chief of service of the department of Obstetrics, Gynecology and Women's Health at New Jersey Medical School (NJMS), believes it's due in part to the increasing number of doctors who are closing their

practices or leaving the state. "Two years ago we grew 21 percent, last year we grew 5 percent and for fiscal year 2006, we have grown 15 percent each month and we have never advertised," he says. The state- and grant-funded practice provides a wide range of services for all patients, no matter what their socioeconomic status.

Malpractice insurance is a problem in all fields of medicine, Barrett says, but it is particularly high for certain specialties, among them obstetrics. "There are two lives involved, and parents can sue for some time after the baby is born. There is a running joke among OBs that if a baby doesn't end up going to Harvard, you'll probably hear from the parent's lawyer," he says.

Barrett says in the vast majority of malpractice cases there is no deviation from the "standard of care." But high-risk cases can turn sour quickly, he says, and that's what makes headlines. He







Left to right: Anthony Caggiano, MD, Gerson Weiss, MD, and Theodore Barrett, MD

the result of lowering malpractice premiums. In the two years since Texas passed tort reform, insurance premiums decreased 17 to 24 percent, and the state is no longer in crisis. California, another non-crisis state, has had a cap on non-economic awards since 1975.

"As physicians, we want people to be compensated when there is a bad outcome," Caggiano says. "We aren't advocating capping the economic award; caring for an impaired

child is extremely costly. Capping the non-economic awards, however, would benefit everyone."

Getting tort reform passed has proven to be no easy task. Bills to do so got through the U.S. House of Representatives nine consecutive times, but each time they were hung up in the Senate. The individual states are having similar problems.

In the meantime, physicians are practicing defensive medicine—ordering tests and treatments they would not otherwise perform. Caggiano says that in 1968, the Cesarean section rate, for example, was 5 to 6 percent. Now it's 30 percent. The American consumer is picking up the tab for these additional tests and procedures, and it's about \$6 billion a year.

Caggiano himself retired from private practice in 2001 after 32

adds that even if a suit is eventually dropped, it takes a huge toll on the physician, the physician's practice and his or her family.

"As a physician, I want to focus my full attention on my patients," he says. "I shouldn't have to worry about the deposition I have to give the next day, or the court appearance I have to make. If there is a bad outcome, we want to make sure the patient is compensated, but frivolous lawsuits hurt many people and add to the rising cost of healthcare."

Lawsuits are the major reason malpractice premiums for obstetricians in a crisis state are \$100,000 and more a year, explains Anthony Caggiano, MD, clinical associate professor of obstetrics and gynecology at NJMS. "That means obstetricians often work well into June or July just to pay their insurance, not any of their

other overhead," he says. "And Medicare, Medicaid and HMOs have ratcheted down the amounts they are reimbursing for procedures, which can make it extremely difficult to stay afloat."

Caggiano, who is the political action chair of the Medical

Society of New Jersey, explains that two types of damages are awarded to a plaintiff in a malpractice suit: economic and non-economic. In an obstetric case, the economic settlement is awarded for the care of an impaired child for the rest of his or her life. An expert examines the baby and then testifies as to how long the child may live and the type of care that will be needed.

Along with the economic award, the plaintiff receives a non-economic award, commonly known as pain and suffering. "Some juries are very sympathetic," says Caggiano. "They think, 'What if that were me or my child,' and they make dramatic awards." And payouts have been getting larger and larger: The median award in 1996 was \$503,000; in 2000 it was \$1 million.

Whatever the case, legislation, known as tort reform, would place a cap on the non-economic portion of the settlement with

Lawsuits are the major reason

malpractice premiums for obstetricians in a crisis state are \$100,000 and more a year.

years and 6,800 deliveries. The high cost of insurance factored into his decision, but was not the primary reason. "There is a 'happiness exchange' between the physician and the patient that doesn't happen in any other field," he says. "Unfortunately, in this country, we seem to need a full-blown crisis before we take action. Things are going to have to change. After all, having a baby is God's way of saying the world should go on."

The good news is that medical students share his view and are still choosing to go into this specialty. "About 10 percent of this year's NJMS graduating class is going into OB/GYN, which is great news. There are definitely pockets across the country where students are shying away from the field, but overall, the number is stable," says Gerson Weiss, MD, chair of the Department of Obstetrics, Gynecology and Women's Health at NJMS.

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He explains that there are no studies giving definitive answers as to why the number of students choosing OB/GYN dwindled, but the popularity of all specialties is cyclical. "Fifteen years ago, you couldn't sell a spot in anesthesiology," he says. "Now those spots are coveted. I remember a time when students wanted nothing to do with orthopaedic surgery or radiology, and they've come back. We see those trends over the years."

The ebb and flow of students may not be unusual, but there have been other changes. One is the number of women who are entering the field. It's estimated that sometime around 2011 to 2013, the majority of specialists in OB/GYN will be women. Why is this happening?

Weiss contends that an unsubstantiated assertion, circulating a few years ago, was the impetus for the change. Deans of medical schools around the country told male students that only women were successful in the specialty; and the male students went elsewhere, he explains. "Of course that's not true and we've gotten the word out," says Weiss. "Our current OB/GYN class is one-third men—more than we've had in years."

Along with the increase in women, more foreign students are entering the field. Many go to medical school in their native countries, then come to the U.S. to complete residencies and to practice. Weiss says most are excellent students and are an asset, particularly to practices with diverse populations.

Natalia Rezvina is a perfect example. The fourth-year OB/GYN resident at NJMS completed medical school in Russia and came to this country 10 years ago. She shadowed several doctors and knew immediately that she wanted to do an OB/GYN residency and practice in the U.S. Resources are more plentiful, a greater number of procedures are performed and medicine is far more sophisticated in general here, she observes.

Initially she had a tough time. "I spoke very little English, so at first I had to look up almost every other word when I studied," she recalls.

Now 35, Rezvina has 300 deliveries and 400 C-sections under her belt and loves what she is doing. "You bring joy into your patients' lives," she says. "And this is the only specialty where you are a surgeon, an internist, and even a pediatrician, of sorts. Sometimes, you're even a counselor."

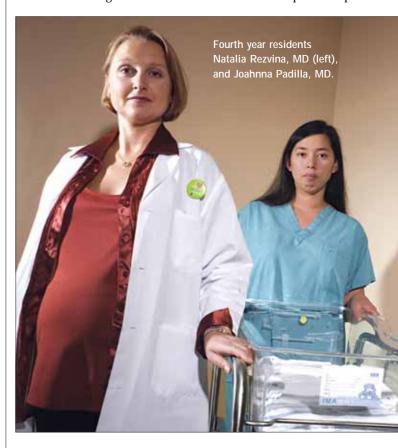
She especially likes that OB/GYN offers options. "You can deliver babies when you're younger and have the stamina to be up in the middle of the night, and then as you get a little older, stay in the office and do only gynecology."

Rezvina and her husband Alexander have a 5-year-old son, Nicholas, and an infant daughter, Emilia. A jeweler with a predictable schedule, her husband cares for the children when the resident is on call. Rezvina says the satisfaction she finds in the job far outweighs the problems.

Another fourth-year resident, Joahnna Padilla, agrees with that

assessment. "It's a strange climate, but I'm mentally prepared for it," says the 32-year-old. "I know the drawbacks: long grueling hours and high insurance. But I love what I do and can't imagine doing anything else." She is looking forward to having lifelong patients and possibly even delivering some of her patients' grand-children.

The controversial social and political issues surrounding OB/GYN are of great interest to her as well. She hopes to help



patients make informed decisions on issues like birth control; the morning-after pill; harvesting one or two embryos in an extremely high-risk, multiple pregnancy; and abortion. Students at NJMS have the option of learning to perform abortions. Padilla chose to learn, but will probably do them only in the first trimester and strictly for medical reasons after that.

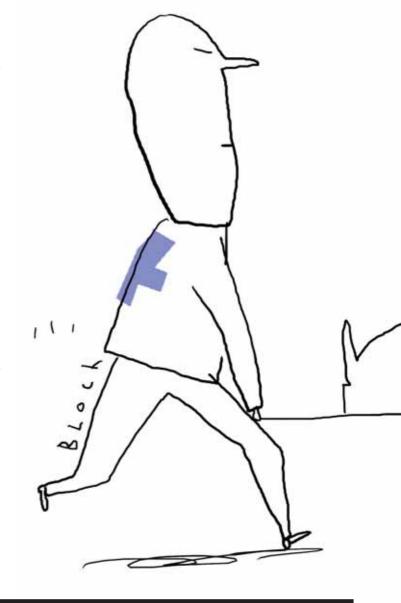
As for malpractice insurance, Padilla is very upbeat. She believes that with time, more states will pass tort reform and insurance costs will begin to drop. And, she points out that, statistically, of 100 malpractice suits, about 40 are dismissed before going to trial. Of those that go to trial, about 70 percent are won by the defendant-physician. "We've learned a number of things to help avoid lawsuits, including how to document very clearly," she says. "But I believe getting to really know your patients and forming good relationships with them is the best way to do that."

JOHN EMERSON NEW JERSEY MEDICAL SCHOOL 27

The Toxic Role "Spare

By Florence Isaacs

t's a case of alarming arithmetic. Over a span of years, a group of small, individual medical factors grow at the same time—until their sum equals serious health consequences. The phenomenon, known as metabolic syndrome, significantly raises the risk of cardiovascular disease and death. It affects an estimated 25 percent of American adults today (40 percent of adults over 40), and has become a galloping national health problem. "Put all the factors of metabolic syndrome together, and we're talking about a two- or three-fold increase in risk for heart attack or stroke, and a five-fold increase in risk for development of diabetes.



of the



Yet we're probably not diagnosing it as much as we should," says David Bleich, MD, associate professor of medicine at New Jersey Medical School (NJMS) and chief of the Division of Endocrinology, Diabetes,

and Metabolism at UMDNJ-University Hospital. Recent "Consensus Recommendations from an Expert Panel," commissioned by the New Jersey Academy of Family Physicians, are helping to change that, as well as focusing clinicians on maximizing quality of care.

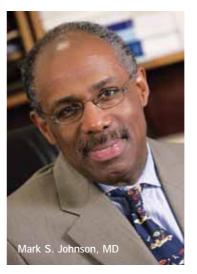
Labeling a Dangerous Condition

Metabolic syndrome is a constellation of four medical irregularities: obesity, high blood pressure, elevated blood sugar levels and abnormal lipids. When these components occur in combination, they dramatically increase cardiac morbidity and mortality. However, concerns and inconsistencies have fueled confusion about the syndrome. To clear it up, the New Jersey Academy of Family Physicians is issuing guidelines that are being sent to 57,000 family practitioners throughout the country. The guidelines set these major criteria for diagnosis:

- Waist circumference greater than 35 inches for a woman or 40 inches for a man
- Fasting triglycerides 150 mg/dL or higher
- HDL less than 40 mg/dL in a man, less than 50 in a woman
- Fasting blood sugar 100 mg/dL or higher
- Blood pressure 130/85 mm Hg or higher

Patients with at least three of these factors have metabolic syndrome. "The prime driver of the syndrome is intra-abdominal obesity," explains Bleich, who served on the expert panel that wrote the new guidelines. "Fat in the abdomen is very metabolically active. It produces a multitude of toxic substances that go beyond cholesterol and triglycerides, including cytokines, which play an important role in regulating blood vessels and insulin sensitivity, and directly affect the stickiness of the blood."

There may be a genetic predisposition to metabolic syndrome. Latinos and Native Americans are at very high risk for obesity and diabetes. Even Asian populations are at high risk in certain respects. "They have never been challenged by fast foods and other high-fat, high-sugar food sources. Now that's changing and they don't have to weigh as much as other groups to have alarm-



ing amounts of intraabdominal fat," says Bleich.

Addressing a Debate

The new guidelines also address the controversy about whether the label of metabolic syndrome is

more helpful to patients than simply treating each individual abnormality involved. The answer is yes. The guidelines support looking at patients as a whole, rather than separate parts, and help physicians conceptualize a comprehensive plan to deal with all the factors together.

"Labeling a patient with metabolic syndrome focuses clinicians on the big picture. It sensitizes them to the fact this person has a high risk for cardiovascular disease or diabetes, and needs more intensive treatment. High triglycerides (or mild hypertension or elevated blood sugar) might not raise a red flag individually, but look at them together and you see a serious problem," says Bleich.

Labeling also helps physicians send a stronger, more motivating message to patients, according to Mark S. Johnson, MD, professor and chair of the NJMS Department of Family Medicine. "If you clump obesity, high blood pressure, insulin resistance and high lipids together (and they often do occur together), rather than view them as four different problems you have to take care of, you can talk to patients differently. You can tell them, 'We need to team up and work together to achieve total cardiac wellness—because if you don't do your part, you will have a much higher risk for heart disease or death,'" says Johnson, who also served on the guidelines panel.

At UMDNJ, physicians quantify that risk for individual patients with a new tool called a cardiac risk calculator. In a typical scenario, a patient comes in for a checkup after getting new health insurance. She's 55, 5'3" tall, and weighs 170 pounds. Her blood pressure is 160/90; the bulk of her fat is around the waist. Bloodwork discloses that her blood sugar is 200; cholesterol is 245; HDL cholesterol is 39, and LDL cholesterol is 170.

"She walks into your office feeling fine. By the time you've completed your evaluation, you find she has hypertension, very high cholesterol, central obesity and probably diabetes—the major components of metabolic syndrome," says Johnson.

"When you plug her age, blood pressure, cholesterol, etc., into the calculator, you can estimate her risk of heart attack in the next 10 years. The patient above has a 24 percent chance of having one. Then you can recalculate the risk if she gets her cholesterol down to 180 (18 percent) or her blood pressure down to 130 (13

The Almond Study At UMDNJ

N January 2006, recruitment will begin for a new study at UMDNJ, "The Metabolic Effects of Almonds in Patients with Pre-Diabetes." Funded by a \$212,000 grant from the Almond Board of California, the research will examine whether consumption of 20 percent of daily calories from almonds can prevent or slow the development of diabetes. For example, a subject who consumes 1,500 calories a day will eat 300 of those calories in almonds $(1^{1}/_{2}-2 \text{ oz.})$. Studies already show that dietary and other intensive lifestyle intervention is better at preventing diabetes than pharmacotherapy.

"We want to see if almond consumption decreases subjects' risk of developing diabetes. We will also look to see whether almond consumption decreases C-reactive protein and overall cardiovascular risk," says Michelle Wien, DrPH, RD, the study's lead investigator. Bleich is co-investigator, along with Maya Raghuwanshi, MD, associate professor of medicine, Division of Endocrinology, Diabetes and Metabolism, NJMS Department of Medicine; Riva Touger-Decker, PhD, RD, associate professor and program director of graduate programs in clinical nutrition, UMDNJ-School of Health Related Professions (SHRP); Barbara Greenberg, PhD, associate professor and director of research epidemiology, quality improvement and evaluation, UMDNJ-New Jersey Dental School; and Julie O'Sullivan Maillet, PhD, RD, professor and chair of SHRP's Department of Primary Care.

Study participants with elevated blood sugar will be recruited from The University Hospital and from students and employees at UMDNJ. For more information call Michelle Wien, DrPH, RD, at 973-972-9487 or David Bleich, MD, at 973-972-6170.

percent). Do this in front of patients, and it's a powerful motivator. It also provides visible targets to aim for," adds Johnson.

The NJMS Department of Family Medicine has a grant to train 100 physicians in the community to use the calculator, which is available as a computer program, as well as other evidence-based tools available on a PDA. Software for the online coronary heart disease risk calculator can be downloaded from this link: www.intmed.mcw.edu/clincalc/heartrisk.html. Software can also be downloaded from the NIH Web site: www.nhlbi.nih.gov/guidelines/cholesterol.

Treatment and Prevention

Although there is no magic bullet for metabolic syndrome, it can be managed—and the guidelines offer a plan clinicians can institute in their offices. The goals are reducing cholesterol, lowering blood pressure, getting diabetes under control if the patient has it, and weight loss. All four are affected by lifestyle changesdecreasing calorie intake while increasing energy expenditure that are the first line of attack.

"Two studies have found that lifestyle intervention is very effective in slowing progression of Type 2 diabetes through a combination of increased physical activity and moderate weight loss of 5 to 7 percent of body weight," says Michelle Wien, DrPH, RD, assistant professor, SHRP Department of Primary Care, Graduate Programs in Clinical Nutrition.

She notes, however, that quality of calories is just as important as quantity. "We're finding, for example, that reducing carbohydrates and increasing the 'good' fats - monounsaturated fats such as olive oil, peanuts and peanut oil, almonds and avocadosbe a viable strategy for patients with high triglyceride levels."

Smoking cessation is also key. Medications are important, too, such as baby aspirin for those with higher heart attack risk, statin drugs to lower cholesterol and reduce inflammation in blood vessels and in some cases oral diabetes medications.

"We'd like to intervene before people get to the point where they have metabolic syndrome," says Johnson. "We want to stop patients, especially young patients who don't yet have dangerous numbers, from getting too big. Because people eat more and exercise less, we're seeing diabetes, hypertension and high cholesterol at younger ages."

The High Cost of an Efficient Society

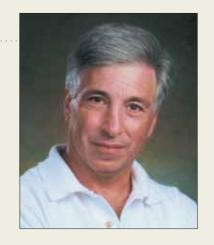
Projections now suggest that the next generation may not live longer given the obesity and diabetes epidemics today and a 60 percent jump in metabolic syndrome since the 1990s. "We've flattened our world, cutting physical activity and accelerating the pace of life—and it may be that our push for efficiency has thrown us out of balance. We're mobile and wired, and we don't even have to walk out of the house to pick up the newspaper or go to the library. We eat more fast foods and processed foods than ever," says Bleich.

"Obviously there are things we have to do to change this reality, starting with educating our children on proper nutrition and exercise. Over many years, small changes such as taking the stairs instead of an elevator, going out for a walk after dinner, leaving a small portion of every meal uneaten or reducing portion size, can lead to dramatic improvements in obesity, metabolic syndrome and diabetes. If we can adopt these ideas as a society, we can begin to shift the pendulum toward healthier lifestyles and better health outcomes."

New Jersey Medical School alumnifocus

Joseph V. DiTrolio, MD'79

A Message from the President



T'S good to be back as president of the NJMS Alumni Association. My first official duty was to emcee the Scholarship Awards Dinner on September 29, which had to be one of the best days of my life. I have never felt so satisfied or proud. The dinner is a warm memory that will last a lifetime. We awarded almost \$150,000 in alumni scholarships to 16 percent of the eligible student population. Several people were so moved that they came forward to make donations before the dinner concluded.

Any second, third or fourth year student who received a high pass or honors in all their courses was awarded an alumni scholarship. That alone was impressive, but more so were the three families who established scholarships and spoke about their deceased children who either graduated from NJMS or did not live to do so. There was not a dry eye in the house. To have those few hours away from all of life's trials was worth our staff's hard work in organizing the dinner, and to see in person the appreciation from both the students and their parents was overwhelming. It is rare in today's world to be acknowledged for all the good deeds we do every day, but this one was worth it.

In closing, I hope to see more of you at next year's dinner, to experience the rush one gets from helping a future physician in need. These students will always be dear to me, and I ask us all to dig a little deeper so that they can reach their dream. The gift of education is shared as much by the recipient as the donor. •

32 PULSE WINTER 2006 PHOTO: MFXINC.COM

Alumni Association Scholarship Awards Dinner 2005

N September 29, the Grand Foyer was filled with more than 250 scholarship recipients, parents, donors and NJMS administrators who arrived expecting to witness the traditional presentation of scholarship awards. This type of program can be tedious. Not this time, however. Everyone there was moved by the touching remarks from many donors—family members, grateful patients, colleagues and friends—who spoke from the heart about why they wished to honor someone by supporting an alumni scholarship.

Several scholarships were made possible by alumni and friends who have supported the Endowed Scholarship Campaign. These endowments, established with a minimum contribution of \$25,000, are named for a person of the donor's choosing. Earned income from the endowment is awarded each year in perpetuity, making this a permanent gift.

The gratitude of our students is best summarized in the following excerpts from notes written to their benefactors:

"While the costs of medical school keep rising, it is comforting to know that members of our profession are interested in helping future doctors. It forges a bond between the generations and makes us feel as though the alumni are behind us in our efforts."

—Nrupen Baxi '08

"It is inspiring to realize that you who award me this scholarship once sat where I sit, studied as I study, perhaps groaned from time to time as I groan, and are now in the prime of your careers... yet still you look back and reach out a hand to pull along those who follow you. It is a privilege to be part of this chain and certainly I, too, in my time will look back to NJMS and lend my support...." — Michael Ehrenreich '06

For information on creating an endowed scholarship, contact Patrick Bower of the Foundation of UMDNJ at 973-972-8761.

- 1. 2005 Named Scholarship award recipients
- 2. Mary Leigh Anne Daniels '06 is awarded The Alumni Association-New Jersey Medical School Endowed Scholarship by Dr. DiTrolio.
- 3. Left to right: Bijal Patel '08, Natalie Uy '08, Samantha Herman '08 and Jaymin Patel '08 were selected to participate in the Summer Externship in England Program during July 2005.
- 4. 2005 Class Scholarship award recipients









AJ. SUNDSTROM NEW JERSEY MEDICAL SCHOOL

Julian E. De Lia, MD'72

Saving Twins in Peril

by Jill Spotz

ULIAN De Lia began his medical career at a very early age.

So early, in fact, that he was still in grammar school. In the 1950s, De Lia and his two brothers accompanied their father, a Newark physician who worked out of their Mt. Prospect Avenue home, on house calls, watching him as he visited sick patients.

They also pitched in at home by taking phone messages for him and scheduling appointments. This early appreciation for patient care spurred De Lia to pursue a medical career. Little did he know that he would also save lives in the future—except he would save them before they were born.

Following in his father's footsteps, he enrolled in the College of Medicine and Dentistry of New Jersey and received his medical degree in 1972. "We served our clinical years in the Martland Building," he explains. "That's where my father did his internship in the early 1940s. He was also on staff for many years at Martland Hospital."

During the summers after his sophomore and junior years, De Lia worked

in a cardiology research lab and had dreams of becoming a cardiologist or a thoracic surgeon. "But the residents in OB/GYN were down to earth," he explains. "It was easy to get caught up in the excitement of childbirth. My chief resident, Earl Greenwald, was also very inspirational. He took an interest in me, which led me to choose OB/GYN as my specialty."

It was also a defining time to be in training to become a physician. In the early 70s, Newark was still recuperating from the riots. Patients were reluctant to go to hospitals in the city, so suburban hospitals were particularly busy. At the time, De Lia was doing his residency in obstetrics and gynecology at St. Barnabas Medical Center in Livingston. "We were

up to our elbows in clinical work, which prepared us well for our future careers," he explains. "I developed a certain confidence that I could not have achieved working in any other place."

After two years in private practice in New Jersey, De Lia yearned for something more dynamic. He transferred to the University of Utah School of Medicine in Salt Lake City, where he was able to fulfill the dream of wearing three hats: teacher, clinician and researcher. De Lia began investigating twin-to-twin transfusion syndrome (TTTS) in 1983.

TTTS is a disease of the placenta that occurs in 10 percent of identical twin pregnancies, affecting more than 4,300 pregnancies in the U.S. each year. This serious condition happens when twins are connected in their single shared placenta by abnormal blood vessels. These interconnecting vessels may cause one to get too much blood, overloading his or her cardiovascular system. This baby may die from heart failure, while the other baby may die from the loss of blood. The problem is in the placenta.





De Lia developed and pioneered a surgery to combat the high mortality rate of babies with TTTS, which prior to the development of his surgery was as high as 80 to 100 percent.

Otherwise the babies are perfectly healthy.

De Lia developed and pioneered a surgery to combat the high mortality rate of babies with TTTS, which prior to the development of his surgery was as high as 80 to 100 percent, with more than half of the surviving babies suffering neurologic handicaps. "The key to preventing morbidity in these babies is to isolate their circulations by disconnecting the blood vessels," he explains. "I found a laser that delivered enough power to coagulate the vessels in the womb, and linked it to available endoscopic instruments."

After some preliminary animal exper-

iments, he performed his first intrauterine placental laser surgery in 1988. A small incision is made on the mother's abdomen, and De Lia uses a 3.5 mm operative endoscope to find and seal these blood vessels, evenly distributing the nutrients and blood between the twins. In appreciation, his first patient asked De Lia to be the godfather of the surviving child.

De Lia's placental laser surgery dramatically alters the odds for babies with TTTS. In 90 percent of the cases at least one twin survives; in 68 percent, both twins live. Less than 3 percent of the survivors have any disabilities or birth defects, compared to up to 25 per-

Julian De Lia, MD, with staff at St. Joseph Regional Medical Center in Milwaukee.

cent with other treatments.

The medical community was initially skeptical of De Lia's innovative procedure. His challenge was that some colleagues in obstetrics did not understand the placental pathology. "On the other hand, pediatric pathologists, who were my real mentors, did realize its magnitude," he explains. "They saw the 'connections' in the placenta along with the lost twins, and understood. One pointed out that the placenta is the only biologic organ that can kill two or more persons at one time."

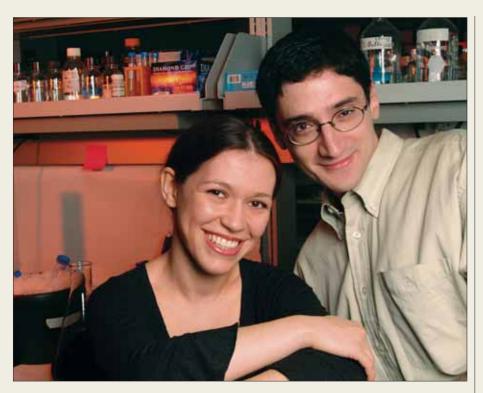
After perfecting the surgical procedure, De Lia transferred to St. Joseph Regional Medical Center in Milwaukee to start the International Institute for the Treatment of Twin to Twin Transfusion Syndrome. He chose Milwaukee because of its central location in the country, so pregnant women had no more than a four-hour plane trip from most parts of the U.S.

De Lia has treated patients from 39 states and Canada, and has conferred on TTTS in all 50 states and 35 countries to date via telephone and e-mail. He has received numerous awards for his work, including the Gemini Award from the Center for the Study of Multiple Birth and the Research Award for Innovations in Gynecologic Surgery from the American College of Obstetrics and Gynecology. He was also recently named by his peers in the International Fetal Medicine and Surgery Society as one of the four 'fathers' of maternal-fetal surgery.

De Lia's most recent challenge is to convince obstetricians to recognize

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alumnifocus PROFILE



How to Link Love and Science and Live Happily Ever After

by Maryann B. Brinley

TAKE two gifted young medical student-scientists. Put them on the same academically demanding MD/PhD career track at New Jersey Medical School (NJMS). Let their paths cross one afternoon outside the director's office.

Fourth-year NJMS students Larry Koreen, PhD, MPH, and Irina Sigal Koreen, PhD, know the happy ending well: They were married on Aug. 10, 2003, the result of a dynamic match built on love between two people intent on living life to the fullest. Both share a dedication to medicine and research, will graduate from NJMS in May, and are pursuing ophthalmology residencies. "Ideally, we'd like to be in the same pro-

gram or near each other," Larry explains, underscoring a crossed path this couple has nearly perfected.

Six years ago, Larry was standing in the hallway speaking with the director of the MD/PhD program when Irina walked up to inquire about an upcoming meeting. Was it love at first sight? Perhaps, he recalls. "I remember feeling a little nervous and I had that sudden rush of energy around her," he says. "I was in my second year of medical school and she was in her first but we had both decided on the MD/PhD option." Irina, who was born in Moldova—a part of the former Soviet Union—and whose family emigrated to the U.S. when she

NJMS students Irina Sigal Koreen an husband Larry Koreen

was 11, finished her PhD in three years in May 2004, allowing them to enter their third year of medical school together. "That wasn't easy. She did it in record time," Larry says. Hard work had been valued by each long before they met. "It was funny when we learned that both of us were the valedictorians at our college graduations," he adds trying to explain how in sync their lives are.

Medicine and science are very much a part of the entire Koreen family. Larry's older sister teaches science while his younger sister, Susan, 24, is in her third year of medical school at Columbia and engaged to marry Matthew Wosnitzer, a fourth-year student at Robert Wood Johnson Medical School (RWJMS). "Matthew, Irina and I will all graduate from UMDNJ in May, making for quite a celebration," he says.

Larry, 29, graduated from Monmouth University and completed his PhD in January 2004, doing research on the importance of genetic variations in clinical strains of *Staphylococcus aureus* bacteria at the International Center for Public Health. At the same time, he studied at night to complete a Master's in Public Health. "It was a perfect blend of research and public health. In four years, I got the PhD, as well as the MPH, did a six-month post-doc and got married too," he laughs.

"It was hard but our parents helped a lot with the wedding," Irina, 26, adds. His folks live in Long Branch, her family is in Livingston and the couple commutes to Newark from Montclair. "Some days we find ourselves in the same hospital but not always," she says.

"Mine is a long and strange story," she laughs. Before entering medical school,

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while finishing her studies at NJIT in the UMDNJ seven-year BS/MD program, she was contacted by NJMS professor Andrew Harris, PhD, who wanted her to consider the MD/PhD program. He had heard about her undergraduate research from a colleague and wanted her to join his lab. Irina told him that the option would "probably take too much time, too much commitment and was just too much of everything." An MD/PhD program can require more than seven years to complete. Harris persisted and offered her a job in his lab for the summer before medical school started. "After three weeks of work, I liked the project so much that when he asked me if I had changed my mind about getting the MD/PhD, I said that I had. This has been one of the most fulfilling things I've ever done, though it was hard." Irina's PhD research in the Department of Pharmacology and Physiology focused on gap junctions, the intercellular coupling mechanism that underlies many physiological processes.

For Irina, a difficult part of the MD/ PhD program was transitioning back and forth between research and medical school. "They are two very different environments. In the PhD program, which begins after the second year of med school, you are completely on your own with no memorizing and no clinical or classroom time. When you go back to medical school after being away for several years doing research, writing and then defending your thesis, you enter your third year and find yourself with a whole new class of different students." It helped to have Larry alongside. He says, "I did the post-doctoral work for six months so Irina could catch up with me. It was very exciting studying MRSA (methicillin-resistant S. aureus) which cause bacterial infections common to

hospital environments." One of Larry's research aims was developing a new DNA-based typing test for these staph infections that have become so resistant to antibacterial medications.

What attracted both the Koreens to ophthalmology is the versatility which will offer them opportunities to combine surgery, clinical medicine and research. "I can do clinical exams, surgery and also delve into ocular genetics looking for mutations in genes that might cause a patient to develop an eye disease. I'll also be able to study the epidemiology of eye diseases," he says. Two subspecialties that appeal to Irina are ocular pathology and neuro-ophthalmology. "Having the PhD gives me the option to practice medicine, perform research as well as teach," she says, a talent she discovered when she became that big kid on the block her fourth year of medical school. "I really enjoyed teaching the younger students."

Take two equally ambitious, multitalented medical researchers who fall in love and this happy ending might appear to be nearly impossible. Competition could easily kill romance. But not in the case of the Koreens, a couple who has certainly mastered the arts of synchronicity and love above all.

Alumni Profile

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severe protein/calorie malnutrition in pregnant women and its connection with TTTS at mid-gestation. "Mothers have been ignored in fetal therapy," De Lia observed. His studies have shown that all patients who have received laser surgery are anemic and malnourished. "If maternal protein levels are depressed from malnutrition, the absorption of water by the baby through the placenta is enhanced," he explains. Maternal malnutrition may provide future insight into some perceived enigmatic issues for TTTS fetuses, and risks for the mothers of multiple gestations in general.

De Lia visits New Jersey often to see family. Nine years ago, he and his wife made an important side trip to St. Lucy's Church on Seventh Avenue in Newark. This was personal—to pay a visit to St. Gerard, the patron saint of expectant mothers. After more than 20 years of working with babies, De Lia and his wife wanted a healthy baby of their own. Like many of the patients he has helped throughout the years, their wish was granted.

Save The Date!

Annual Alumni Reunion Dinner Dance/Golden Apple Awards Dinner Saturday, April 1, 2006

The Sheraton Tara Hotel, Parsippany, NJ

We will be celebrating the milestone anniversaries of the classes of 1961, 1966, 1971, 1976, 1981, 1986, 1991, 1996 and 2001, as we join with our students when they honor their NJMS faculty.

For more information and to obtain a contact list for your classmates, please call the Alumni Office at 973-972-6864.

alumnifocus CLASS NOTES

1960

Leo M. Pisculli, MD, says his daughter Jenny will complete a family practice residency in the Maine/Dartmouth program in June 2006.

1961

Vincent M. Napoliello, MD, hopes all his classmates will be present on April 1, 2006, to celebrate the 45th anniversary of their graduation from medical school.

Richard E. Pelosi, MD, retired from the practice of neurological surgery in New Jersey and moved to Palm Beach Gardens. FL.

Guy T. Selander, MD, is practicing full-time in family medicine, continuing as chair of the board of both Memorial Hospital (Jacksonville, FL) and First Professionals Insurance Company.

1962

Robert M. Schumacher, MD, resides in Ridgecrest, CA, with his wife Kathy and their six children. He practices pediatrics and family medicine.

Raphael M. Verdile, Jr., MD, has retired from active practice.

1966

Vincent Oriente, MD, retired and lives part of the year in Hawaii.

1970

Judith K. Amorosa, MD, a clinical professor of radiology at Robert Wood Johnson Medical School, was inducted into the Gold Humanism Honor Society.

Fred Schwarz, MD, MBA, JD, practices ophthalmic plastic, reconstructive and orbital surgery and has recently added healthcare law to his accomplishments, having graduated from law school and passed the bar exam.

1971

Matthew L. Sofer, MD, retired from private practice in rheumatology and is a volunteer faculty member at USC School of Medicine.

1974

David H. Brody, MD, has announced that **Kristopher P. Korsakoff, MD'99,** joined his gastroenterology practice in Port Jervis, NY in July 2005.

David Dines, MD, has been appointed medical director of ATP (Association of Tennis Professionals) and is the president of American Shoulder and Elbow Surgeons.

1975

Jeffrey I. Lasker, MD, received the 2004 American Academy of Pediatrics Quality Care Award and was recently promoted to assistant clinical professor of pediatrics at Harvard Medical School.

Anthony R. Scillia, MD, is medical director of the in-patient voluntary psychiatric unit at Morristown Memorial Hospital.

1976

Joel S. Policzer, MD, is vice president and national medical director of VITAS Innovative Hospice Care in Miami. He is board certified in hospice and palliative medicine, internal medicine, hematology and medical oncology. He co-edited 20

Common Problems in End-of-Life Care, and developed teaching materials and courses at the Nova-Southeastern University College of Osteopathic Medicine and the University of Miami School of Medicine. In addition, he developed a curriculum in end-of-life care and Jewish law and gives seminars at the Jewish Theological Seminary of America in NY.

1979

Mark S. Johnson, MD, MPH, professor and chair of the Department of Family Medicine at NJMS, serves as the immediate past president of the Association of Departments of Family Medicine.

Dennis G. O'Neill, MD, is concluding a two-year term as president of the medical staff at Manchester Memorial Hospital and has served on the Connecticut Medical Planning Board for 10 years.

1980

Anthony D. Ciardella, MD, is associate clinical professor at the University of Connecticut School of Medicine, and also chair of the department of medicine at Bradley Memorial Hospital in Southington.

John Scoles, MD, and his partner Rod have a daughter, Kate Alex Scoles-Bran.

1982

Mitchel B. Alpert, MD, is board-certified in pediatrics and pediatric

cardiology and is director of pediatric cardiology at Jersey Shore Medical Center. He is a clinical assistant professor of pediatrics at UMDNJ–Robert Wood Johnson Medical School.

Frank L. Kane, MD, past president of the New Jersey Academy of Family Physicians, was elected chair of the American Board of Family Medicine. He is a preceptor for third-year NJMS students and practices in Sparta. He is a clinical assistant professor in the Department of Family Medicine.

1983

Edwin Schulhafer, MD, a specialist in allergy, asthma and immunology, has founded the Capri Medical Spas in Hillsborough and Annandale, NJ, to provide cosmetic medical procedures. He also maintains a private allergy practice in Annandale.

1986

Henry M. Ushay, MD, is medical director of the pediatric observation unit at the Children's Hospital at Montefiore Medical Center.

1988

Lauren LaPorta, MD, is chair of psychiatry at St. Joseph's Medical Center in Paramus, and is among the first psychiatrists in the U.S. to be board-certified in psychosomatic medicine.

Susan Kornacki, **MD**, has joined AmeriPath New York as associate director of GI pathology services.

1989

Paul E. Kovatis, MD, is the president of the Bergen County
Medical Society—the youngest
physician to serve in this capacity.
He is also assistant director of the
foot and ankle division within the
department of orthopaedic surgery
at Hackensack University Medical

IN MEMORIAM

The Alumni Association extends our deepest sympathy to the families and friends of our alumni who have passed away.

Joshua Kaback, MD'96 of Sherman Oaks, CA, passed away on May 31, 2005. He specialized in anesthesiology.

Gregory Peter Nestler, MD'87 passed away suddenly on October 11, 2005. He was an anesthesiologist at the Jersey City Medical Center and resided in Califon. He leaves his wife, Stacy Scofield-Nestler, and two children.



Center, and a member of its Board of Governors.

1990

John Norris, MD, specializes in internal medicine and has opened practices in Key West, FL. He is on staff at Lower Keys Medical Center.

1991

Paul J. Molinaro, MD, JD, graduated in 2005 from Chapman University School of Law and is starting a law firm with a partner. They will focus on malpractice, personal injury and real estate.

Jeffrey S. Upperman, MD, a pediatric surgeon at Children's Hospital of Pittsburgh and assistant professor of pediatric surgery at the University of Pittsburgh School of Medicine, has been named to the board of directors of KidsVoice, a nonprofit agency that advocates in court for abused children.

1995

Eric Rosendorf, MD, and Kenneth Belitsis, MD'96, have joined Medical Associates of Ocean County (NJ), a gastroenterology practice. Both have special training in endoscopic ultrasonography.

1996

Jenny H. Kim, MD, has joined Sanofi-Aventis as medical director.

Stephen Sun, MD, has been promoted to senior director of global medical affairs at Alpharma Pharmaceuticals.

1997

Biren Chokshi, MD, is now a diplomate of the Board of Orthopaedic Surgery. He is practicing at The Center for Bone and Joint Care in CT and is on staff at Day Kimball Hospital in Putnam, CT.

Sumant Ramachandra, MD, PhD, is vice president, global project management, for the ScheringPlough Research Institute (SPRI) in Kenilworth, NJ. He is the project leader for key oncology products at SPRI, and co-chairs a team charged with identifying external oncology candidates for licensing.

1998

Patrick John Rowan, MD, married Dryden B. Watner in August 2005 in Hamilton, Bermuda. He is a supervising psychiatrist at Long Island College Hospital.

Scott Simon, MD, has joined Orthopaedic and Neurosurgery Specialists, a combined practice, in Stamford, CT. He is a spine specialist with experience in the treatment of herniated discs, spinal stenosis, tumors and trauma, and one of a few physicians nationwide who is trained in neurological surgery and orthopaedic techniques to treat scoliosis.

1999

Mary S. King, MD, is in her third year of a maternal-fetal medicine fellowship at the Albert Einstein College of Medicine/Montefiore Medical Center, Bronx, NY.

Robert Silver, MD, is medical director for the Joslin Diabetes Center at the Southern New Hampshire Medical Center. He is a member of the Endocrine Society and the American Association of Clinical Endocrinologists, serving most recently as a research fellow in endocrinology, metabolism and diabetes at the Joslin Diabetes Center in Boston.

2000

Frances M. Harris, MD, is practicing at Lakeland Regional Medical Center (FL), where she provides anesthesiology services. She completed her residency at New York Presbyterian Weill-Cornell Medical College in NY, followed by a fellowship in cardiothoracic anesthesia.

Stay in Touch!

You are important to us, and we would like to hear from you. Mail this form to: Alumni Association of New Jersey Medical School, 185 S. Orange Avenue, P.O. Box 1709, MSB-B504, Newark, NJ 07101-1709. Photos are welcome. You can also send your news via e-mail to: njmsalum@umdnj.edu or fax us at 973-972-2251.

Name		Graduation Year
Home Phone	Office	Fax
E-Mail Address	120	ALIMINITY.
Mailing Address	VIII)	
What I Have Been Doing (enclose	photos)	1

I would like to be a representative for my class.

Please join the Alumni Association of New Jersey Medical School.

\$50.00 General Dues Resident in Training \$15.00 \$1,000.00 Lifetime Membership

Visit http://njms.umdnj.edu/, click on Alumni and Alumni Association and then Online Dues Payment to pay your dues online.

The Lifetime Membership is being offered to our alumni as a means to perpetuate the goals of the Alumni Association and enable its members to sustain their support in a more meaningful way. All categories of membership will afford you the opportunity to keep connected with us. You will continue to receive all membership benefits, including NJMS Pulse magazine, information about upcoming events and reunions, and library privileges.

Neil Kothari, MD, joined the NJMS faculty in November 2004 as an assistant professor in the department of medicine. He was named associate program director for the internal medicine residency at NJMS in February 2005.

Luke Rigolosi, MD, completed a residency in physical medicine and rehabilitation at the Kessler Institute for Rehabilitation and is a board-certified physiatrist in Albany, NY.

2001

David J. Cennimo, MD, is chief resident, medicine, at UMDNJ-University Hospital and will start a combined adult and pediatric infectious diseases fellowship in July 2006 at NJMS.

2005

Adam J. Fechner, MD, was married in June 2005 to Jacqueline Mesnik. He is a resident in ob-gyn and women's health at UMDNJ-University Hospital, Newark.

A SPECIAL THANKS to Kenneth G. Swan, MD, Cornell University Medical School'60, for his generous support to the Alumni Association of NJMS in appreciation for being presented with the Alumni Association Distinguished Professor Award. He

is a professor of surgery at NJMS.

Fred F. Behrens, MD

ACULTY, staff and students at New Jersey Medical School are mourning the loss of Fred Behrens, MD, professor and chair of the Department of Orthopaedics. Behrens passed away on November 12, leaving behind a host of friends and admirers who saw him as a great physician, teacher and humanitarian.

Behrens grew up in Switzerland and studied at the University of Bordeaux, France, the Westminster Medical School in the UK, and at the University of

Zurich, where he obtained his medical degree. In 1969, he moved to Canada as a general surgery resident and discovered his passion for the field of orthopaedics.

Behrens completed a master's degree in experimental surgery and an orthopaedic residency at McGill University in

Montreal. In 1977, he was offered an assistant professorship in orthopaedic surgery at the University of Minnesota. There, his career took a decisive turn which helped shape the field of orthopaedics. His focus on trauma led to a new understanding of external fixation of open fractures and gained him an international reputation. His methods saved the limbs of many patients and are still in use today.

In 1992, he was appointed professor and the first chair of the newly created Department of Orthopaedics at New Jersey Medical School. Starting with a small faculty, the department has become the largest orthopaedic group in New Jersey. As chair, Behrens developed one of the nation's premier orthopaedic residency programs.

Wayne Berberian, MD, residency program co-director and associate pro-

fessor in the Division of Foot and Ankle Surgery, called Behrens a gifted teacher and compassionate physician. Sanjeev Sabharwal, MD, associate professor in orthopaedics and chief of pediatric orthopaedics, says, "Fred had all the qualities of a great man who led by example."

Others he worked with had equally high regard for him. Steve Schmidt, director for orthopaedic administration at NJMS, said Behrens was respected by those who knew him for his clinical, academic and administrative skills, and for his passion to achieve the highest outcome in everything he did. "He had a keen interest in sharing with those less fortunate, and a warmth and concern for those around him," says Schmidt.

Behrens' compassion for others was exemplified by his involvement with Habitat for Humanity, an organization that builds homes for those who need them. Under his leadership, the orthopaedic department sponsored a Habitat home in Newark. Members of



the department, as well as other UMDNJ staff, donated money toward the effort. They were organized into crews and worked at the site every weekend until the house was completed.

Abby Schwalb, residency education coordinator, notes that after every commencement, Behrens gave the graduates books as gifts. This year, he chose National Geographic Guide to the National Parks of the United States, and New Jersey: The Natural State. When he presented them, he reminded the graduates that although work is consuming, there is too much beauty in the world not to enjoy it fully.

In his spare time, Behrens enjoyed reading and traveling. In recent years, he became an avid runner, participating in several marathons, including the New York City Marathon.

Surviving him are his wife Valerie; sons, Thomas, Mark and Erik; his mother, Lydia Behrens, and sister, Sylvia Bieri. Donations in his memory may be sent to the Orthopaedic Residents Fund, Foundation of UMDNJ, Attn: Chris Sickels, 65 Bergen Street, Suite 1551, Newark, NJ, 07107 or Habitat for Humanity, Newark, Inc., P.O. Box 3246, Newark, NJ 07103.

- CAROLE WALKER





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