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EDUCATION

Incoming Students: Who They Are, Why They Came

SHANELLE NELSON
School of Nursing
PhD Program

JOFFREY OESTREICHER
College of Physicians and Surgeons

PETER MANYANG
Mailman School of Public Health

PATRICIA GORDON
PhD Program, Biochemistry & Molecular Biophysics

AMY-KRISTINA HERBERT
College of Dental Medicine

About the Incoming Class

The College of Physicians & Surgeons
Incoming students: 153
Gender: 50% female; 50% male
Underrepresented minorities: 21%
Age range: 20-36
Geography: 34 states; 5 foreign countries; Puerto Rico

The Mailman School of Public Health
Incoming students (all degrees): 479
Gender: 77% female; 23% male
Underrepresented minorities: 16%
Age range: 21-62
Geography: 36 states; 27 foreign countries

The College of Dental Medicine
Incoming students: 77
Gender: 42% female; 58% male
Underrepresented minorities: 10%
Age range: Most students come straight from college
Geography: Majority from New York State, California, New Jersey and Texas; 5 foreign countries

The School of Nursing
Incoming students (BS and MS): 189 (168 BS), (21 MS)
Gender: 92% female; 6% male
Underrepresented minorities: 6%
Age range: 25-32
Geography: US, 3 foreign countries

Incoming students (DNP and PhD): 18 (14 DNP), (4 PhD)
Gender: 72% female; 6% male
Underrepresented minorities: 22%
Age range: 26-49
Geography: US, 1 foreign country
* Based on available self-reported data

Doctoral Programs
Incoming students (all programs): 38
Gender: 58% female; 42% male
Diversity: 3%
Age range: 19-33
Geography: 9 states; 11 foreign countries

MD/PhD Program
Incoming students: 13
Gender: 45% female; 55% male
Underrepresented minorities: 3%
Age range: 21-24
Geography: 11 states

To read these students’ stories, please see page 8.

Photos: Eileen Barroso and Michael Dames
Dear Colleagues and Students,

As the 2008-9 academic year begins, I again have the great pleasure of welcoming a group of exemplary new students to Columbia University Medical Center. This year, nearly 1,000 students have enrolled in our schools and programs, and each one of those students is a stand-in in his or her own right. Our students’ talent and enthusiasm strengthen and invigorate this campus. This year begins with a number of changes in academics, facilities and service.

At Columbia’s Mailman School of Public Health, Linda Fried, MD, an expert on aging who joined CUMC in February from Johns Hopkins, has the opportunity to guide and nurture her first class of incoming students as the new dean of the school.

A newly established PhD in Nursing program at the School of Nursing received its first group of students – health policy experts, nurse researchers, and clinical scholars – this fall. The PhD program provides students with an understanding of the philosophical and theoretical underpinnings of nursing science and a strong foundation in research methods. Graduates of the PhD program will have acquired the skill and vision to further nursing knowledge at the local, national, and international levels.

Education Enhancements on Many Levels

Changes in curricula for several of our programs are under way to improve how we prepare our students for 21st century health care.

Ronald Drusin, MD, professor of medicine, was appointed vice dean for education at P&S in August. Dr. Drusin is leading a task force that is developing a new medical school curriculum to go into effect in fall 2009 for the class of 2013. The new curriculum will allow students to have more patient contact earlier in their education, better integrating classroom teaching with clinical exposure. In their last year, students will complete an academic project in one of five areas: research, medical education, global health, social medicine or community service.

The College of Dental Medicine has enhanced its curriculum on care for patients with special needs, for the first time instituting a clinical rotation at the Cerebral Palsy Center of New York for each third-year student. More curriculum enhancements are planned for next year.

Under the leadership of Richard Robinson, PhD, professor of pharmacology and associate dean of graduate affairs, the first phase of the reorganization of the PhD program – aimed at creating a uniform admission standard across all departments – was implemented in fall 2007. Initial curriculum changes have gone into effect this fall as part of a plan to create a doctoral program that encourages greater collaboration in both teaching and research.

Our educational leaders have been engaged in ongoing renovations to create the classrooms and study space in the new education center in the lower levels of the Hammer Health Sciences Center. This new space will greatly improve classrooms and educational space for all of CUMC.

I am also pleased to report that classrooms on the third and fourth floors of Hammer have all been standardized with new audiovisual equipment and podia. So far, 15 classrooms have been upgraded with the latest in classroom technology; by next year, all 45 classrooms will be transformed.

An important service change has been made to 5-Help, the medical center’s help desk. Previously, this was the number to call when experiencing computer problems; now 5-Help offers a convenient way to have most issues related to working, living and studying on campus swiftly resolved. The change to 5-Help is part of an ongoing effort to streamline support services to students, faculty and staff so that they may concentrate on their work – whether it is research, administration, teaching, patient care or studying – without impediments.

CUMC remains committed to providing its students the best possible curricula and learning environment. As new and returning students come to campus this fall, we look forward to another outstanding year as they prepare for careers as the leaders and innovators of tomorrow.
Physician, IT Expert Focuses on Broad Campus Upgrades

For the past year Bob Sideli, MD, chief information officer, has led CUMC’s drive to develop and implement innovative technologies to transform human resources, research administration, and facilities. Under the leadership of Lee Goldman, MD, executive vice president and dean of the faculty of health sciences and medicine, and Lisa Hogarty, chief operating officer, IT has become integral to the medical center’s push to upgrade services for faculty, staff, students, and patients.

As a medical doctor who also is an associate clinical professor of biomedical informatics and an expert in medical informatics, Dr. Sideli straddles the worlds of medicine and technology and thus is uniquely able to assess the needs of all who use the medical center.

Dr. Sideli first came to Presbyterian Hospital in 1985 for his internship in anatomic pathology. After completing his residency here as well, he joined Columbia’s nascent Department of Medical Informatics, where he was instrumental in developing the hospital’s clinical information system. He also developed and taught the university’s first medical informatics course. From 1993 to 1995, Dr. Sideli was the director of administrative information systems at Presbyterian Hospital, directing a team of more than 30 systems analysts and programmers as they revamped the hospital’s business systems, such as accounting, payroll and financial management. Dr. Sideli returned to CUMC in 2007 after spending a decade in IT leadership positions in health care, to assume responsibility for all information technologies at the medical center.

In Vivo spoke with Dr. Sideli recently to learn about his plans for CUMC IT.

Why did you return to Columbia after spending more than a decade away? Columbia has always been close to my heart. It’s a place where I learned anatomic pathology from some of the best minds in the country and where I was given the opportunity to combine my two great interests, computers and medicine, by working in medical informatics. When I got the call from Columbia last year about taking over IT here, I was working at a company that helps physicians and health care systems integrate computer technology into their practices, and I wasn’t looking to make a move. But when I was told that this administration was trying to tackle problems across the board — whether it’s balancing the budget, improving services or upgrading facilities, and that IT would be a strategic partner in all these efforts, I thought I could help.

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“...Our people deserve the best and we are trying to give it to them.”

BOB SIDELI

Describe some of your overall objectives? We want to transform CUMC into an organization where faculty, staff and students have access to state-of-the-art processes, equipment and facilities. That means that professors will teach in standard ‘electronic’ classrooms that will enable them to easily access their teaching materials, where an electronic health record now in implementation will allow physicians to have access to the most up-to-date information about their patients, where a clinical trials management system now being implemented will improve clinical trials recordkeeping, where researchers will have better tools to manage grant applications, and where a computerized system is being developed to track and manage space — a perennial concern at the medical center. These are just some of the areas in which IT is working to modernize and improve the way the medical center functions.

IT is behind the recent expansion of 5-Help, a service similar to the city’s 311 line. What was the rationale behind the 5-Help expansion? Two words: Improved service. We want to develop a culture at the medical center in which service is built into the organization. Our faculty, staff and students need to know that human resources, IT, facilities and the student housing office are here to help them whether they have a benefits question, a problem with a computer virus, or their office is too cold. Now there is one number to call for help with most work-related issues [see sidebar below for more on 5-Help].

From the perspective of someone who is now on the inside looking out, rather than the other way around, how would you sum CUMC’s drive for change? Our administration is committed to enabling everyone to do his or her job as productively as possible, with as few impediments as possible. If things work better, if our campus looks better, if concerns are dealt with quickly and painlessly, then people just are happier to be here and everyone benefits. CUMC IT is committed to being a partner in achieving this type of environment. I can honestly say that I have never met smarter, more caring and talented people than those who work and study at this medical center. Our people deserve the best and we are trying to give it to them.

— Anna Sobkowski

Better Safety, Security Coming for 168th Street Subway Station

Washington Heights Assemblyman Adriano Espaillat has secured $500,000 from New York State to improve lighting and upgrade video surveillance at the 168th Street subway station. The station serves the A, C and No. 1 train lines and is the subway system’s second busiest stop north of 96th Street. About half of CUMC’s employees use the subway to get to work each day. The upgrades were announced at a news conference in August at which Mr. Espaillat was joined by Lee Goldman, MD, and officials from New York Presbyterian.

Who they are: Edward Franco and Melina Reyes
What they do: Screen and triage all phone calls and walk-ins for the entire CUMC HR team
Most common calls: Questions about benefits, health insurance, flexible spending, retirement, employment verification, payroll, jobs at Columbia

Who they are: Nancy Rodriguez, Maritza Pierret, Marco Camacho, Louise Jones, Noemi Bueno, Garcia, Tanya Kent-James, Pedro Montalvo. Back row, from left: Edward Franco and Melina Reyes
What they do: Handle service calls for student residences at 60 Haven Ave., 100 Haven Ave., and the Georgian building
Most common calls: Maintenance service requests for the residence halls and requests for off-campus housing information

administration was trying to tackle problems across the board — whether it’s balancing the budget, improving services or upgrading facilities, and that IT would be a strategic partner in all these efforts, I thought I could help.

addition to IT. The 5-Help expansion is part of the medical center’s ongoing effort to improve services for all who work, study, teach and live on this campus. Here is a look at the new service and the people behind the phones:

STUDENT RESIDENCE SERVICES

HUMAN RESOURCES – EMPLOYEE SERVICE CENTER
Pioneering Gerstner Scholars

In 2007, CUMC created the Louis V. Gerstner, Jr., Scholars Program, to help young P&S physician-scientists conduct translational research and develop new treatments for patients. The first four Gerstner Scholars, profiled here, will receive yearly stipends of $60,000 for up to three years to conduct their research.

The Gerstner Scholars Program is made possible by the Louis V. Gerstner, Jr. Foundation and the Louis V. Gerstner family. Mr. Gerstner, the retired chairman and CEO of IBM, is chairman of the Department of Ophthalmology’s Board of Advisors. He has supported CUMC for many years through the establishment of the Louis V. Gerstner, Jr. Scholars Program.

Preserving Vision with Robots

One of the first things Howard Fine does to prepare for a test run of a new robot for eye surgery is to crack open an egg.

It’s not breakfast he is interested in; rather, Dr. Fine uses the membrane inside the shell of fertilized chicken eggs as an animal model for retina surgery. The tiny blood vessels in the membranes are nearly identical mechanically to those in the human retina and perfect for fine-tuning the robotic surgical techniques that Dr. Fine hopes will soon be able to reverse what is a leading cause of blindness in the United States.

Just as atherosclerosis clogs vessels in the heart, leading to heart attacks, athero-sclerosis also obstructs the tiny vessels in the retina, which can lead to blindness. More than 2 million people are stricken each year in the United States with obstructed retina vessels, and more than a half million go blind from the disease. No treatment exists to restore blood flow and prevent vision loss.

“We want to apply the techniques of interventional cardiology to reopen retinal blood vessels with miniature stents,” says Dr. Fine. Until now, however, the size difference between coronary arteries and retinal vessels has prevented eye surgeons from even attempting the procedure. “The retina’s vessels are 10 to 20 times smaller than coronary arteries – about the width of a human hair – and inserting a stent into one requires more precision than human hands are capable of.”

That’s where the Intra-Ocular Dexterity Robot comes in – designed by Nabil Simaan, PhD, assistant professor of mechanical engineering and head of the Advanced Robotics & Mechanism Applications (ARMA) Lab at Columbia; Dr. Fine; two ARMA engineering graduate students, Wei Wei and Roger Goldman; and Stanley Chang, MD, chairman of ophthalmology. With two robots perched on a ring (which will eventually hover over a patient’s eye but now hangs over the chick membrane), Dr. Fine uses joysticks to manipulate the robot’s dual snake-like arms to insert nearly invisible metal stents into blood vessels.

“While robots have revolutionized a number of surgical fields, their use has been lacking to date in ophthalmology, in part because of the small size and high precision required,” Dr. Fine says. This robot is one of the most precise medical robots ever built, capable of manipulating tools with 5-micron precision, an order of magnitude improvement over unassisted human hands.

With the fundamentals of the robot and the surgical procedure now in place, Dr. Fine says it will probably take six months to a year of tinkering before the team can attempt the insertion of stents into the retinal blood vessels of lab animals. Once the stents appear safe over the long term, Dr. Fine plans to apply to the FDA to start a clinical trial in humans.

“I think we have the potential to help countless patients who have lost vision from retinovascular disease,” Dr. Fine says. “And if this technology is successful for ophthalmology, it might be useful in other areas of the body as well.”

Our Bodies, Our Bacteria

Judging strictly by cell number, about 90 percent of you isn’t really you. For every one of the 10 trillion human cells in your body, 10 bacteria cells also make your body their home.

“People usually think of the gut when they think of the microbiome, but humans are colonized by bacteria in all sorts of places: the nose, the skin, the genital tract,” says Dr. Ratner. “Usually we live happily side by side, but on occasion, something changes to tip the balance toward disease. So we have to wonder, how much of our health, or illness, stems from us and how much stems from the bacteria we harbor. It’s clear the bacteria contribute, but it’s not well understood in what way.”

Take the example of premature birth, which Dr. Ratner studies with the help of the Gerstner scholarship. An overgrowth of Gardnerella vaginalis and other bacteria in the genital tract is strongly suspected to cause about a quarter of all premature births in the United States. “It’s a big number and a huge public health issue,” Dr. Ratner says. “If we can find a way to eliminate the risk associated with the infection, we could prevent about 100,000 preterm births, about 6,000 infant deaths, and severe neurological disability in 6,000 more.”

But there are few clues as to how these infections contribute to preterm birth. The major roadblock in unraveling the role of Gardnerella has been the lack of an animal model to study, Dr. Ratner says. Mice, rabbits and nonhuman primates have all been inoculated with the bacteria in the past

Chang, Gerstner Honored as Eye Institute Turns 75

Stanley Chang, MD, second from left, shown here with his wife, Jean, second from right, was honored with Louis V. Gerstner Jr. at a gala celebration at the Metropolitan Club in New York on Sept. 18. Dr. Chang is the Edward S. Harkness Professor of Ophthalmology and K.K. Tiew and Ku Teh Ying Professor of Ophthalmology. Mr. Gerstner, the retired CEO of IBM, and his wife, Robin, left, are long-time supporters of the Edward S. Harkness Eye Institute. About $1.2 million was raised at the event for eye research.
At Work Across Disciplines


“Physician-scientists are critical in translating basic research into new treatments,” Mr. Gerstner says. “My hope is that this program will give gifted young physician-scientists the time they need to do their research so they can have a lasting impact.”

KARA GROSS, MD
Assistant Professor of Clinical Pediatrics – Gastroenterology and Nutrition

Finding something better for her patients often keeps Dr. Gross up at night.

“The problem with today’s pharmaceutical treatments for IBD is that, for some patients, these either don’t work or they don’t work for long,” Dr. Gross says. “Even with the strongest medications we have, many patients will suffer a relapse of disease within a year. When a patient is only 15 and already facing experimental therapies, all we can do sometimes is to hope that something better becomes available in the future.”

Finding something better for her patients often keeps Dr. Gross up at night feeding the mice she uses in her IBD research, which is putting the disease in a new perspective.

For a long time, IBD — when it wasn’t thought to be all in a patient’s head — was considered solely a problem of the way the immune system functioned in the gastrointestinal tract. The immune system keeps the gut in a constant state of low-grade inflammation to protect the body from foreign invaders; IBD is believed to start when the immune system malfunctions for unknown reasons, allowing inflammation to flare out of control. All of today’s treatments suppress the immune system.

Research by Dr. Gross and others now focuses on the role of neurotransmitters in the gastrointestinal tract. The gut’s neurons and the immune system communicate with each other, and recent studies suggest that the neurons may be stoking inflammation by recruiting inflammatory cells. Neurons do this by secreting chemical messengers, known as neurotransmitters or neuromodulators.

Altering neuro-immune communication may succeed in reducing inflammation in the bowel, and Dr. Gross’ own studies, in collaboration with Martha Welch, MD, assistant clinical professor in psychiatry and in neuroscience with Michael Gershon, MD, professor of pathology and cell biology, already suggest one way to achieve that. Using oxytocin — an anti-inflammatory neuromodulator that neurons use to “talk” to the immune system — Dr. Gross is trying to decrease the intestinal inflammation in mice with IBD.

“I’m optimistic that we’ll eventually get to drug testing,” Dr. Gross says, “but the biggest issue now is that we need more preliminary data to secure NIH support. The Gerstner grant allows me to spend large amounts of time in the lab, doing what I need to do to really get this project going.”

When Igor Matushansky tells his oncology colleagues that he wants to cure sarcoma by turning malignant cells back into normal cells, instead of killing the tumor, the most frequent response is, “With what? Alchemy?” According to Dr. Matushansky, however, the idea is fully grounded in laboratory research, not magic.

He would not even be the first to try what he calls “differentiation therapy.” For the past two decades patients with acute promyelocytic leukemia have been successfully treated with retinoic acid, which converts malignant cells into normal white blood cells.

The idea of reprogramming malignant cells has been accepted among lymphoma, leukemia and other “liquid” cancer researchers for decades, but Dr. Matushansky — who did his PhD research on leukemia — was surprised to learn that solid tumor researchers generally do not subscribe to this approach.

If a clinical trial he is planning proves successful in sarcoma patients, Dr. Matushansky hopes to start changing a few minds. Survival in sarcoma patients has not improved much in the last 25 years; half of all tumors return within three years, and with recurrence, patients usually have about a year to live.

The trial will test whether low doses of drugs that can reprogram cancer cells in the laboratory also work in recently diagnosed sarcoma patients. “If the tumor comes back, its cells should be more differentiated and mature, and we already know that such tumors have a much better prognosis.”

One “reprogramming” drug, Zolinza, has already been approved for use in some cancers. But in a twist that Dr. Matushansky finds perplexing, the drug is currently used at maximally tolerated/cytotoxic doses to kill cells, not to differentiate them.

“People sometimes ask me if it’s really important for me to treat patients while I do my research,” Dr. Matushansky says. “The answer is yes, and this is one reason why. If I weren’t treating patients, I never would have known that drugs explored for their reprogramming properties are now being used as cytotoxic agents in practice. If drugs like Zolinza are used instead in low doses to reprogram cells, I believe we can dramatically change the prognosis for patients with a relapse of sarcoma from a six-month survival rate to about 10 years,” he says. And that would surely have some oncologists believing in magic.

Adam Ratner
Continued from previous page

but none develop an infection that mimics disease in humans.

Dr. Ratner’s recent findings may finally provide the long-awaited breakthrough. Hamster cells, he found, can be made vulnerable to a toxin from Gardnerella if they express a human molecule called CD59, which Gardnerella uses to recognize human cells. He is now trying to create transgenic mice that express the molecule, which may lead to treatments, although he admits a breakthrough probably lies a good deal in the future.

“Anytime you’re working on something that’s not well-characterized, there is an element of risk,” he says. “It’s possible we’re wrong about the role of Gardnerella, but we won’t know if we don’t do the experiments.”

Continued from previous page

IGOR MATUSHANSKY, MD, PHD
Assistant Professor of Medicine

Studying the Role of Neurotransmitters In Inflammatory Bowel Disease

A n ostomy is a drastic option for children with inflammatory bowel disease, (IBD), and Kara Gross, a pediatric gastroenterologist, tries to avoid doing them. But for some patients, this step may be the only thing that will relieve the painful intestinal cramps and frequent bouts of diarrhea from which they suffer.
Stem Cell Breakthrough Enables Progress in ALS Research

The creation of motor neurons from a patient’s own skin cells—a breakthrough announced this summer by a team of Harvard and Columbia scientists—now provides ALS researchers with millions of motor neurons that may be key to discovering ways to stop the disease.

For decades, researchers trying to understand why motor neurons degenerate in ALS have been stymied by their inability to study living neurons from patients. Adult motor neurons—the neurons responsible for muscle contraction—are not accessible from patients, and in any case cannot survive in the lab in petri dishes. “As a result, we don’t understand why motor neurons die, and we believe that is preventing us from developing effective therapies,” says Chris Henderson, PhD, professor of pathology, neurology and neuroscience, and co-director of Columbia’s Motor Neuron Center.

Dr. Henderson, Hynek Wichterle, PhD, assistant professor in pathology and cell biology, neurology and neuroscience, Wendy Chung, MD, PhD, Herbert Irving Assistant Professor of Pediatrics in Medicine, and Hiroshi Mitsumoto, MD, DSc, the Wesley J. Howe Professor of Neurology, are all part of the team that collaborated to create the motor neurons, developed from induced pluripotent stem (iPS) cells. These cells are derived from adult skin cells but behave like embryonic stem cells.

Though initial tests indicate that the iPS-derived motor neurons are indeed motor neurons, additional tests are required to see if they are identical to the gold standard—motor neurons derived from embryonic stem cells. If the human iPS motor neurons pass such tests, Columbia researchers plan to use the cells in high-throughput drug screening to try to find compounds that stop or slow motor neuron degeneration.

Researchers also will try to confirm last year’s discovery—made by Serge Przedborski, MD, PhD, the Page & William Black Professor of Neurology (in Pathology and Neurology)—that motor neurons may be killed in ALS by toxins released by neighboring cells in the spinal cord called astrocytes. The experiments were conducted with neurons and astrocytes from mice; the lab is now working to create astrocytes from the new iPS cells to repeat these tests in human cells.

Any scientific and therapeutic advances stemming from the new cells will take time, perhaps years. Even further away is the prospect of implanting iPS motor neurons into patients as therapy, since iPS cells contain viruses left over from the reprogramming process and tumors may form if they are injected into people. In addition, the potential of implanted cells to reversion the disease course is still unclear.

“One of the big misconceptions in stem cell research is the thinking that once we have stem cells we can simply put them into a patient’s spinal cord and be done,” Dr. Wichterle says. “In actuality, we have lots of work ahead of us.”

Exposure to Trauma May Be Linked to Bipolar Disorder, Not Only PTSD

Bipolar Disorders 10: 503-510

When a patient comes into a doctor’s office suffering from a history of assaults and trauma, the physician may diagnose post-traumatic stress disorder (PTSD) and depression. A new study suggests, however, that bipolar disorder may be present as well, and missed. This is important because mistaking a patient’s bipolar disorder for PTSD may worsen an individual’s condition.

“If the physician only looks for PTSD among patients with trauma exposure, and is not aware of a possibility that the patient may develop symptoms of bipolar disorder, he or she may prescribe the wrong medication,” says the study’s lead author, Yoval Neria, PhD, associate professor of clinical psychology (in psychiatry and epidemiology) and the director of the Trauma and PTSD Program at the New York State Psychiatric Institute.

“Selective serotonin reuptake inhibitors are widely used in primary care for PTSD or depression, but they may make people with a history of bipolar disorder more vulnerable to future manic episodes,” says Dr. Neria, who conducted the collaborative study with the Department of Epidemiology at Malman and the Department of Medicine at P&S, and the Division of Epidemiology at the New York State Psychiatric Institute. “It’s important that primary care physicians screen for lifetime bipolar disorder, to get a fuller picture of what is going on with the patient.”

The study uncovered the link between assaults and bipolar disorder in a survey of nearly 1,000 patients who sought treatment for physical ailments at CUMC’s Associates in Internal Medicine clinic, a large primary care setting in Northern Manhattan. Each patient was screened for bipolar disorder, PTSD, and any previous exposure to assaults that stem from interpersonal conflicts and other sorts of trauma.

A history of bipolar disorder was common in this group, occurring in about 10 percent of all patients, and reports of physical or sexual assault were almost three times greater in these patients as in patients who screened negative for bipolar disorder. The research was funded by the NIMH, the NARSAD, and Eli Lilly & Company.

Earlier Treatment of HIV Recommended

JAMA 300(5): 555-567

Adults infected with HIV should consider initiating antiretroviral therapy sooner than previously recommended, according to new guidelines recently released by a panel of AIDS experts led by Scott Hammer, MD, the Harold C. Neu Professor of Infectious Diseases in the Department of Medicine.

The new guidelines from the 14-member International AIDS Society-USA Panel strengthened its previous position by now clearly recommending that patients start treatment before their CD4 count drops below 350 cells per microliter. In addition, mounting evidence that uncontrolled HIV replication can be associated with heart, liver and kidney damage led the panel to recommend therapy in patients with cardiovascular risk, hepatitis B or C or renal disease, irrespective of the CD4 count. The availability of convenient, safe and durable treatment options along with new studies in the last two years on the benefits of earlier treatment prompted the change, Dr. Hammer says.

“The optimal initiation of treatment must balance the benefits of suppressing the virus with the risks of drug toxicity and emergence of viral resistance,” Dr. Hammer says. “At this point the risk-benefit ratio has shifted toward earlier treatment.”

The research was funded by the International AIDS Society-USA.
Skin and Laser Center Expands with More Treatments, Latest Technology

The Skin and Laser Center in September opened a new, state-of-the-art facility at Columbia Eastside on East 60th Street. The center is equipped with the latest skin-care technology, including a Fraxel laser to improve wrinkles, sun-damaged skin and acne scars, and ultraviolet light technology, including a Fraxel laser to treat port wine stains, severe dermatitis and cutaneous T-cell lymphoma. Five exam rooms – three more than in the previous space in the same building – enable many more patients to receive care.

The Department of Dermatology originally created the Skin and Laser Center in 2000, when Robyn Gmyrek, MD, assistant clinical professor and head of the department's faculty practice, joined the full-time faculty. Dr. Gmyrek and Julide Tok Celebi, MD, associate professor of clinical dermatology, began performing cosmetic procedures to treat patients for a variety of cosmetic skin conditions, such as unwanted hair, brown spots, unsightly blood vessels, sun-damaged skin, wrinkles and leg veins.

The practice has grown steadily and, in recent years, it became difficult in a tight space to keep up with the growing patient demand and new developments in dermatological technology. “We were unable to add new lasers and expand due to space limitations,” says Dr. Gmyrek.

Upgrades at the center also benefit general dermatology patients. In addition to performing cosmetic procedures, both Drs. Gmyrek and Celebi screen for skin cancers and treat a wide array of dermatologic diseases. Dr. Celebi also offers “mole mapping,” a photographic approach in which patients at high risk for melanoma have their moles examined by the use of digitized images on computers installed in each exam room.

This technology is state-of-the-art for monitoring patients with many moles or dysplastic moles,” says Dr. Celebi, who, under the auspices of the Herbert Irving Cancer Center, is studying genes related to melanoma metastasis.

“The Department of Dermatology has been good enough to support our center’s growth,” says Dr. Gmyrek. “Now we are much better able to offer the service and treatments dermatology patients expect from a first-class medical center.”

The Skin and Laser Center can be reached at 212-326-5889.

—Matthew Harrison

CUMC’s Affiliate, Harlem Hospital, Receives Coveted “Baby Friendly” Designation

Before taking a breastfeeding class at Harlem Hospital, labor and delivery nurse Elisa Worrell, RN, who gave birth to a son in 2007, never considered breastfeeding. She changed her mind after completing the intensive eight-hour class, as well as a five-part session in the prenatal clinic that all hospital staff are required to take. “Our breastfeeding coordinator, Alison Benjamin, explained the benefits for both mother and baby and helped us every step of the way,” says Ms. Worrell, who went on to breastfeed her son.

Teaching and encouraging new mothers like Ms. Worrell to breastfeed are part of the ‘Baby Friendly’ experience at Harlem Hospital. A global initiative of WHO and UNICEF, Baby Friendly was instituted at the hospital in 2006, although a breastfeeding program has existed there since 1985. Harlem Hospital is the first hospital in New York to earn the Baby Friendly designation by successfully implementing the steps required by Baby Friendly USA. Among other support services, the breastfeeding program encourages parental bonding by allowing newborns to room with their mothers. Because of such efforts, 81 percent of the 1,148 children delivered there in the first quarter of 2008 were being breastfed by their mothers upon leaving the hospital.

“Baby Friendly is part of our ongoing efforts to bring about positive change for patients. It has increasingly become a focus for us over the last few years and continues to be a perfect mesh with our efforts to promote overall health and wellness in our community,” says Catherine Hansen, MD, assistant clinical professor of pediatrics at P&S and chief of neonatology at Harlem Hospital.

Many studies have shown that breastfeeding exclusively for the first six months of an infant’s life has health benefits for both baby and mother, such as reduced infant mortality, improved bonding, and postpartum maternal weight loss. Still, few women breastfeed exclusively for that time, a situation Harlem Hospital is determined to change in its community.

“By promoting breastfeeding, our ultimate aim is to help reduce the risks of common childhood health problems, such as infections, asthma, and diabetes,” says John Palmer, PhD, executive director of Harlem Hospital. “We are pleased and proud that Baby Friendly has recognized our efforts.”
How became interested in dentistry: In 2006, I attended the Summer Medical and Dental Program at CUMC. I realized, for the first time, the importance of the oral cavity to overall health and became fascinated with dentistry. [ed note: This intensive six-week Robert Wood Johnson Foundation-sponsored program for underrepresented minorities enables pre-dent and pre-med college students to be mentored, do lab work and attend classes in career development.]

Post college experiences: I was a resident actor at the Blackfriars Playhouse at the American Shakespeare Center. I also played a character on the PBS reality-based show “Colonial House,” which rolled back the clock to 1628 to portray early settler life. After more than three months on the set in Maine, with only licorice and baking soda for oral care, I realized how obsessed I am with teeth and oral care.

Goals: I have a strong public health leaning but may focus on providing dental care to actors in the entertainment industry. If an actor doesn’t have a healthy smile or has missing teeth it can cast that person a role.

Extracurriculars: I plan to become involved with the Student National Dental Association, the minority student dental association, and to volunteer to teach children in public schools about oral health care. I’m also interested in the College of Dental Medicine programs that provide oral health care to people in countries where such care is limited.

Why Columbia? I wanted to attend a dental school where I would also get a comprehensive medical education. A dentist must have a thorough foundation in medicine to practice medicine optimally today. I was lucky enough to find this type of education in a city also rich in the arts.

Post-college experiences: I worked for three years as a writer for a series called “This Week in History” for the History Channel. In 2004, I moved to Washington, D.C., to work for the John Kerry campaign. Most recently, I’ve worked for Dr. Mehmet Oz as a producer for his “Oprah and Friends” show, in addition to writing and researching for Dr. Oz’s appearances on the “Oprah Winfrey Show.” Working with Dr. Oz has been one of the best experiences of my life.

Goal: To combine medicine, writing and public health.

Extracurriculars: I will explore ways to integrate all my interests.

Why Columbia? There are more non-traditional students at PBS than in any other school I considered. Medicine is a serious undertaking and emotionally taxing, so the more life experience you bring to it the better. And I love the sense of community here.

PATRICIA GORDON
PhD Program, Biochemistry & Molecular Biophysics
Hometown: Minneapolis, Minn.
Education: BS, Vassar College, majored in biochemistry
How she feels about science: I love studying the details of life. It’s hard to do anything that has a direct application to medicine without studying biological and biochemical systems.

Post college experience: I joined the Peace Corps right after college and spent two years in Ghana, where I taught chemistry and biology to about 250 high school students in rural villages. I also organized HIV education programs for students and local villagers.

What she loved about the experience: I lived in a bungalow on the school compound in a gorgeous, mountainous region. Even though there was no running water and the electricity was intermittent, the natural beauty was breathtaking. And the people were extraordinarily warm and friendly, looking out for me in every way. I learned to speak Feso, the local language, and made many close friends. It was hard to say goodbye to them.

Extracurriculars: Community service has always been an important part of my life. As a student at Vassar I volunteered at local public schools in Avughkeepsa, helping teachers conduct science projects. At Columbia, I plan to work with the local community on youth and education projects.

Goal: I’d like to teach and do research, preferably in a small college setting.

Why Columbia? The program is set up in such a way that I can rotate through different labs, spending 10 weeks in each, so I can really get a feel of the kinds of research being done here. And of course, I love being in New York.

JEFFREY DESTREICHER
College of Physicians and Surgeons
Hometown: Fairfield, Conn.
Education: BA in political science, Brandeis; post-baccalaureate pre-med program at Columbia
Why chose to go to medical school: I’ve always loved medicine and took pre-med classes in college but I also had a lot of other things I wanted to do. Medicine ultimately trumped my other interests in history, politics, and writing. With medicine, it was never a question of “if,” but “when.”

AMY-KRISTINA HERTZ
College of Dental Medicine
Hometown: Englewood, N.J.
Education: BA, Columbia College, Spanish language and literature; MFA in classical theater from the School of the Arts at Columbia.

How became interested in dentistry: From a young age, I’ve always taken care of my teeth; when I was a child, you lay down to sleep with your sick friends in a makeshift clinic under a tree and wake up in the morning to see that some have died during the night from measles or some other infectious disease, it’s impossible not to want to do something to change the public health situation in Africa.

SHEALLEN NELSON
School of Nursing, PhD Program
Hometown: New York
Education: BS in Community Health Education, University of Maryland at College Park; BSN from the College of New Rochelle; MSN in Health Leadership, University of Pennsylvania
Current position: I’m a quality management specialist for the Pediatric Cardiac and Lung Transplant programs at New York-Presbyterian. I ensure that the programs comply with strict mandated policies and regulations.

Research interests: I’m interested in nursing workforce issues and health disparities among minority populations.

Goal: I’d like to have an academic faculty position in a New York nursing school, one with a research-intensive hospital affiliation.

Distinction: I was named a Jonas Nursing Scholar in 2008. [ed note: The Jonas Nursing Scholars Program is designed to address the nation’s accelerating shortage of nursing faculty by supporting educational development of new nursing faculty.]

Extracurriculars: I do volunteer work for New York Cares and the Wellness Center of Riverside Church.

Why Columbia? This is the only school to which I applied. The School of Nursing is affiliated with New York-Presbyterian, the No. 6-ranked hospital in the country, and one that has made a major impact on national nursing policy. And, I’m greatly looking forward to working with my mentor, Dr. Pat Stone.[associate professor of nursing], on nursing workforce issues.

WIDE AND VARIED BACKGROUNDS DISTINGUISH CUMC STUDENTS
—As told to Anna Sołtyszewski

PETER MANYANG
Mailman School of Public Health
Home country: Sudan
Childhood: Due to civil war in Sudan, I was separated from my parents at about age 6 and tried to survive in the desert with other young boys who also had been torn from their families. I spent most of my childhood in refugee camps away from my parents and brothers, who I have not seen since the separation. At 20, I was brought to the United States from Kenya by the U.S. Refugee Program as part of its program to help children such as myself, who have come to be known as the “Lost Boys of Sudan.” I was resettled in Atlanta and have been in this country for seven years.

Education: I received only a rudimentary education as a child in the refugee camps. After coming to America I earned my GED and studied English at a community college before obtaining my bachelor’s in biology at Sewanee, the University of the South. Education is critical to my life’s goals.

Goals: Because I have had malaria, measles, night blindness, and scurvy, among other illnesses, and saw so much sickness, I naturally developed a strong interest in health. When, as a young boy, you lay down to sleep with your sick friends in a makeshift clinic under a tree and wake up in the morning to see that someone has died during the night from measles or some other infectious disease, it’s impossible not to want to do something to change the public health situation in Africa.

Sudan is a country with an almost non-existent public health system, where there are few qualified doctors, nurses or decent facilities anymore. I plan to return there someday to help rebuild the country’s public health system. I believe this is my calling.

Extracurriculars: I speak about my experiences to church groups and rotary clubs. I am always thinking of ways to help the Sudanese people.

Why Columbia? The Mailman School of Public Health puts great emphasis on improving the health of communities not only in the United States, but also globally. I believe I can acquire the knowledge and skills here that will enable me to work effectively in public health both in this country and in Africa.