Ford Presides over Academy

Henri Ford’s typical 14-hour-days may get a bit longer now that he has been elected president of the Association of Academic Surgeons. During his term, Ford (Fel ’93) aims to build greater ties to other academic surgical societies, to give the groups more leverage in terms of advocacy. (That proposal is made more realizable, perhaps, with Ford’s boss, Timothy Billiar, chair of surgery, having just stepped down as president of the other major academic association for surgeons, the Society of University Surgeons.) Ford, who is chief of the Division of Pediatric Surgery at Pitt, will continue his research on necrotizing enterocolitis, a disease affecting premature infants. He will also help set up a model injury-prevention program at Children’s Hospital of Pittsburgh, supported by a grant from the Robert Wood Johnson Foundation. —DH

THINK MOLECULAR

Gene therapy at Pitt is likely to move forward more quickly with the recent creation of the Molecular Medicine Institute, headed by Joseph Glorioso, the William S. McEllroy Professor of Biochemistry. The institute will bring several existing facilities at Pitt under a single umbrella, including Pitt’s Human Gene Therapy Applications Laboratory (which is the only approved site in the country for producing vectors used in clinical gene therapy studies funded by the National Heart, Lung, and Blood Institute). The new Pitt Institute will make it easier for campus researchers to access services needed for gene therapy trials. It will also support other areas of molecular medicine, including research on the use of peptides to deliver proteins into cells and the exploration of genes whose activities have not yet been defined, in the hopes of finding potentially therapeutic genes. —DH

FOOTNOTE

Okay, you can’t couple “transplant” and “routine,” but after almost 6,000 liver transplants at Presby, it’s not exactly news—unless the patient is AIDS activist and playwright Larry Kramer (The Normal Heart and The Destiny of Me). Some see Kramer’s operation as a test case for more transplants among HIV-infected patients. It’s a bellwether that Pitt surgeon John Fung finds a bit uncomfortable: “I’d like to think one case doesn’t make or break the whole thing.”
An Oakland medical campus renaissance will bring more greenery as well as “intelligent” buildings that conserve energy and meet the demands of modern care and new biological research.
A Campus Renaissance

“It’s a once in a lifetime opportunity”—Ron Forsythe, a UPMC Health System official, has good reason to be genuinely enthusiastic about what’s in store for the Oakland medical campus, as does Pittsburgh.

The recent UPMC merger with Children’s Hospital of Pittsburgh has given these institutions and the University the occasion to rethink the use of the acres they occupy. The institutional partners saw a number of pressing challenges facing the crowded urban campus: Children’s had determined that its current facility was woefully small and inappropriate for meeting the demands of future care. The University itself is maxed out in terms of modern, experimental biomedical lab space. And anyone who has traversed the “Cardiac Hill” area knows that getting around can be terribly confusing.

The $600 million plan:

Construct a new Children’s Hospital—a 10-level, 500-thousand gross-square-foot facility, to be housed on the Terrace Street side of UPMC Montefiore. Among other improvements, all patient rooms will be private and include accommodations for parents to stay with their children.

Build a 14-story, 480-thousand gross-square-foot Child and Adult Ambulatory Care Center on Fifth Avenue with easy access to Montefiore’s imaging and lab services.

Erect another 14-story building, also on Fifth, to house new biomedical lab space as well as shared core facilities that are key to recruiting and retaining top faculty. Still, some aspects of the plan—huge magnets, intense vibrations, and other attributes of today’s cutting edge structural biology tools—impose severe architectural constraints. “This building is being defined by the biology of the future,” notes one Pitt official.

The University and its partners are determined to put all this together in a way that makes the campus feel welcoming and, well, well put-together. So they’ll add structural cladding around lower floors of existing buildings to lend architectural harmony, wayfinding and “interior streets” to link buildings and help patients and others get around, and greenery—including a parklet that will serve as a clear gateway to the medical campus.

The major facelift is expected to take a total of seven years. —EL

NO BABY STEPS

David Perlmutter makes it clear—the campus improvements coming out of the Children’s Hospital/UPMC merger are, by no measure, baby steps for the University’s pediatric program: “I call it a quantum leap.” The chair of pediatrics, who came to Pitt last year from Washington University in St. Louis, is thrilled about the unexpected windfall. He notes the expanded and modern facilities will put Children’s in a unique position for attracting other top faculty, especially in pediatric subspecialties. That bodes well for Pitt’s chances to garner more federal funding; it also bodes well for the depth of expertise available to care for the region’s children.

The big picture for pediatric education at Pitt as he sees it: “We’ll have the most talented clinicians and researchers teaching the most talented students.” —EL

FOR MORE INFORMATION:
http://www.upmc.edu/newsbureau/director/campus/campus.htm
Don’t miss the video!

Faculty Snapshots

Professor of emergency medicine Donald Yealy (Res ’89) often encounters residents who want to order tests for patients: “I usually ask, ‘Why is it that you want that x ray? That blood count? That set of electrolytes? What are you going to do with the information?’ My view is to teach people how to think through what they’re doing.” Yealy, who recently received the American College of Emergency Physicians Award for Outstanding Contribution in Education, calls these five- to 10-minute conversations “teaching moments.” He uses them frequently when he is in the emergency department or lab, and believes they are largely responsible for his success as an educator. Clifton Callaway (Res ’96), an assistant professor of emergency medicine who trained with Yealy, remembers the decision-making skills Yealy passed on and how reluctant his mentor was to make any patient-care decisions out of habit. “Yealy was teaching evidence-based medicine before it was a fad,” he recalls.

Jonas Johnson wants to reach out to the nearly 40,000 otolaryngologists outside the United States. “I’d like to educate physicians worldwide by providing access to educational materials electronically,” says Johnson, considering his goals for his upcoming term as president of the American Academy of Otolaryngology, Head and Neck Surgery. (Johnson follows the trail of Eugene Myers, chair of the Department of Otolaryngology, who served as president of the academy from 1994 to 1995.) The professor speculates his own election was due to a number of factors: He is the editor of the American Journal of Otolaryngology, has published 15 books and more than 300 articles, and led the academy’s continuing education program. It also helps that Pitt’s department was ranked fifth in the country in 2001 (according to U.S. News and World Report). Johnson’s research at Pitt focuses on a new vaccine designed to help patients with head and neck cancer and the evaluation of surgical methods for the treatment of snoring and sleep apnea. —DH
A Therapeutic Circulatory System

Treatment for metastatic tumors typically has limited success: Only 15 to 20 percent of the time does a tumor shrink to less than half its size and remain stable for about six to 12 months. David Bartlett, who left the National Cancer Institute in October to become chief of the new Division of Surgical Oncology at Pitt, wants those numbers to improve. To date, he has treated 160 patients with a new therapy he helped develop for metastatic liver tumors. Seventy-five to 80 percent of the time, his patients' tumors shrunk to less than half their size and remained stable for about 12 to 18 months.

The therapy involves, in effect, temporarily creating a separate circulatory system for the liver alone. For one or two hours, blood laden with high concentrations of chemotherapeutics circulates through the liver—but can't reach the rest of the body. After the treatment, normal circulation is restored. The technique, which has yet to be tested to see whether it prolongs life, is called regional perfusion therapy. It has been used to treat cancers in body regions other than the liver, but is not frequently performed.

One of Bartlett's goals as division chief is to teach the technique to other surgeons so that its effectiveness can be tested in larger clinical trials.

—DH

AN EYE-OPENING DINNER

A homey fragrance, reminiscent of casserole, greets the small group of first-year medical students gathering in a basement room at Children's Hospital of Pittsburgh. Before they dig into this catered dinner, however, each student will don a “disability.” A young woman stuffs wads of thick cotton in her ears until she can't hear. Another student wears two pairs of plastic gloves to simulate tactile impairment. Others place pads or gauze over their eyes. Eventually, everyone sits down to eat at this evening meeting of the medical school's Disabilities in Medicine Interest Group.

As conversation travels around the table, one of the blindfolded students notes that it's interesting to talk to people you can't see: “A person could be so nice verbally but staring you down.” One of the men with pads over his eyes feels around his plate with his fingers, looking for his knife. Neither the gauze nor latex seems to have impaired the guests' sense of humor tonight. Fumbling is mixed with self-deprecating chuckles. When the prospect of seconds comes up, a blindfolded student admits he would love another helping but fears that would necessitate a trip to the bathroom—a complication he's not ready to take on right now.

At one point, when laughter suddenly erupts at the table, Kendra Papson, whose ears have been insulated with cotton, doesn't know why. She raises both hands in a “What?” gesture. Later, when the gauze and gloves are taken out or off, Papson talks about her frustration: “I wanted to express myself, but couldn't.”

Rob Oliver, a community coordinator at Children's Hospital, and Betty Liu, assistant professor of physical medicine and rehabilitation, direct the postdinner discussion. If someone wanted to offer help, how would you like to be approached? One student comes back with a thoughtful suggestion. Still Oliver, who relies on a wheelchair to get around, closes the discussion with this parting caution: The simulation can provide insight, but the nondisabled can never fully know what it's like to have a disability. —DH

TRY THIS LASER

Visitors to the Zap! Surgery exhibit might play a super-size Operation game, then watch a video—nothing from Disney's studios, though, only real-life drama. They can tune in as Deepinder Dhaliwal, professor of ophthalmology, performs laser vision-correction surgery and learn what she and her patients had to say about the procedure afterward. Dhaliwal, nine other physicians, a scientist, and an engineer affiliated with the School of Medicine or UPMC Health System served as advisers for the $2.2 million Zap! Surgery exhibit, created by the Carnegie Science Center. The exhibit educates the public about minimally invasive surgery, focusing on procedures involving a gamma knife, endoscopes, lasers, ultrasound, cryosurgery, and radiosurgery. Zap! Surgery debuted at the Science Center last year and now travels the country. —DH
One day, 9-year-old Clare—who is tall, has a full head of brown hair, and is autistic—was riding the bus to school. She took off all her clothes and lay down on the bus floor. The next day, her mother—who is a generous woman likely to arrange a ride home for a new acquaintance—called up government offices, saying: You get an aide on that bus for Clare. If my daughter ends up coming to school without her seat belt on again, possibly distracting the driver, we're suing you, because you are endangering our child.

“I was always a shy, retiring person, afraid of authority figures, and not a big social butterfly,” says Kate M. McFadden, M.D. ‘01, Clare’s mother. “I would never say ‘boo’ to anyone before, and now I’m a witch: My daughter will go to summer camp, and you will pay for it. I always thought people knew better than I did, and I would just go along with what people said. Not anymore.”

McFadden’s newfound assertiveness is not the only change that Clare has brought about in her life. In 1990, McFadden was in her first year of a PhD program in physical anthropology at Indiana University, planning a career examining ancient bones for disease. She took a pathology course as part of her work toward her degree:

“Three weeks into the course, I thought: I love this!” She considered going to medical school, but didn’t want to go back to being an undergraduate—and didn’t want to take “unspeakable” courses like chemistry and physics.

Two years later, in 1992, Clare was born. In 1993, M. McFadden completed her PhD coursework. When Clare was about 16 months old, she was diagnosed with mental retardation and, later, autism.

McFadden began to reevaluate her life. Uncovering ancient history suddenly seemed less important than doing something that would help people now. McFadden realized she would have to support Clare long after her own death, and jobs in anthropology didn’t pay well. Chemistry and physics, she thought, no problem. I can do them if I have to.

“It was Clare that made me decide. Medicine was a much better idea for our family, and for her, and for me. I learned that a little suffering now is worth doing what you want to do—because I do like the medicine more than the anthropology, or I wouldn’t have done it.”

McFadden didn’t abandon her PhD, though. While she was taking premed courses she also spent three months examining 5,000-year-old Egyptian skeletons (87 of them). She wrote her dissertation during med school and is putting the final touches on it now. As part of that thesis, she’s arguing that bent bones on some of the skeletons were caused by rickets—though most experts believe that in sunny Egypt rickets wouldn’t have been a health problem. McFadden suggests that pale skin may have been associated with status, leading some ancient Egyptians to avoid the sun.

At home in her cozy Squirrel Hill duplex, where her six-month-old son, Liam, (who is not autistic) is sleeping upstairs, McFadden sits in an armchair, her brown hair swept back from her face. She talks about anthropology, which she hopes to pursue as a hobby. Most skeletons, she says, have one or more distinctive traits—like extra sutures in the skull or a round hole in the breastbone.

“The skeletons feel like people you know,” she says. “They’re individuals in my mind, now, people with characteristics, like my friends.”

She often wondered what life was like for those she studied—the woman buried with an infant, for instance. Similar questions creep up in her first year of a pathology residency at Pitt, where she also lectures in a history of medicine elective for fourth years. In the lab, she finds herself rooting for people whose specimens she’s examining, hoping she doesn’t “find something.” She plans to subspecialize in neuropathology and research autism.

“That’s another reason to be in medicine,” she says. “What you do is try to make life more fair, for other people if not yourself.”