

**THIS VESSEL IS READY FOR BOARDING:** DHMC has the first integrated vascular surgery residency approved in the U.S. After completing the five-year program, doctors are qualified to sit for the vascular surgery board exam.



## FAMILY GOES TO EXTREMES

Normally, when ABC-TV's hit show *Extreme Makeover: Home Edition* rehabs a deserving family's home, the family goes on vacation, often to Disney World. But while a volunteer construction crew raced to build a new 3,000-square-foot ranch house in only 106 hours—less than four and a half days—for the Vitale family of Athens, Vt., Sara and Louis Vitale and their two young sons passed up the chance to go on a free vacation.



Sara Vitale, left, at David's House.

Instead, they spent the time volunteering at David's House, a residence for patients whose children are patients at the Children's Hospital at Dartmouth. The Vitales had spent 18 weeks at David's House in 2005 after their son, Louis Angelo, Jr., was born with severe birth defects. In fact, it was those medical problems that prompted Sara Vitale to write a letter to the show's producers, asking for help in building a home that would accommodate her son's special needs. But David's House didn't even need to ask for the help that the Vitales gave back to them. L.S.C.

## STAIRWAY TO HEALTH

The words "Free / exercise / equipment" appear on successive risers of one staircase. "Stairway to health" is emblazoned on another. There's also "Be a / frequent flier / Frequent / these flights." These snicker-worthy signs began appearing in uncarpeted stairwells at DHMC during the summer of 2006 as part of the Take the Stairs project, an initiative of the Heath Improvement Program (HIP) that's intended to make climbing stairs more appealing than riding elevators.



HIP—for which DHMC earned a 2007 Outstanding Achievement Award from the New Hampshire Governor's Council on Physical Activity and Health—has developed many easy ways to exercise, like walking challenges and scavenger hunts. And those clever stair signs. They may not quite make concrete steps into a stairway to heaven—but a "stairway to health" is a pretty good alternative. A.T.

## No more napping in darkened classrooms

Though not what most people would call a vacation, DMS's radiology elective used to be considered "a bit of a radi-holiday," puns Dr. Petra Lewis. When she was a radiology resident at DHMC in the mid-1990s, she rarely saw students in the department. But things changed in 1998 when Lewis joined the faculty and became director of the radiology electives program.

**Menu:** No longer a "radi-holiday," the department's menu of educational opportunities now includes one basic and three specialized electives for fourth-year students. Radiology has also been incorporated earlier in the medical curriculum, with a computer-based learning program for third-year students and an elective for first- and second-years. And there are now nine hours of lectures—up from two hours a couple of years ago—during second year.

The reason for the changes is that radiology now touches nearly every other specialty. "Greater than 95 percent of [doctors] are going to be involved in ordering or interpreting some form of imaging," points out Lewis.

**Useful:** Students have been quick to realize the utility of the offerings. Basic Clinical Radiology is "one of the most useful and well-taught electives at DMS," says fourth-year student Scott Morgan. The course takes a multifaceted approach, ranging from interactive lectures to "Diagnosis

Please?" e-mail quizzes. It also includes "Cool Case" presentations where, with the help of a faculty facilitator, students teach each other. Each student also chooses a subspecialty and shadows radiologists in that section.

The basic elective is offered quarterly and can accommodate up to eight students at a time. "It's almost always full because it's such a well-run elective," says fourth-year student Christopher Anderson. "It's a small group, and [the lecturers] are very interactive and ask a lot of questions."

The integration of radiology into other courses has also been popular. "We're building on different skill sets at the time [students] need them," Lewis says. In first-year Human Anatomy and Embryology, for example, x-ray and CT images of normal anatomy are



Lewis may lecture in a darkened room, but she's igniting interest in radiology.

presented while students are dissecting those structures in the lab. During second year, radiology lectures are interspersed throughout the curriculum so students learn to use images to identify disease processes.

A new radiology component was also added to the third year: Case Oriented Radiology Education (CORE), a computer-based program. Students read a fictional case, choose the appropriate imaging modality, and interpret the images. There are CORE cases during the eight-week rotations in surgery, inpatient medicine, pediatrics, and ob-gyn-women's health.

**More:** Lewis's hope is that students are "exposed to radiology in an interesting way." Indeed, students have found the field so intriguing that more have chosen residencies in radiology since Lewis took over the electives—from an average of 6% a year in the 10 years before she became director to more than 8% a year in the almost 10 years since—60% higher than the national average of 5%. (A 10-year DMS average gives the truest picture, since the absolute numbers are so small that the percentage fluctuates from year to year.)

"Any time you interact with doctors that are enthusiastic and passionate about their work, . . . it has the potential to turn students on to something they might not have otherwise seen," Anderson says. He'd previously planned to go into emergency medicine but is now applying to residencies in radiology. "I'm a convert," he adds.

AMANDA THORNTON

## INVESTIGATOR INSIGHT

In this section, we highlight the human side of biomedical investigation, putting a few questions to a researcher at DMS-DHMC.

**James Gorham, M.D., Ph.D.**  
**Associate Professor of Pathology and of Microbiology and Immunology**

*Gorham studies autoimmune hepatitis in mice, looking at how T-helper cells develop, get into the liver, and release an inflammatory protein that causes liver damage. He's also a board-certified clinical pathologist and spends 20% of his time on the transfusion service. He joined the DMS faculty in 1998.*

### How did you decide to become a researcher?

As a boy, I was always interested in science. In college I decided to pursue biomedical research. But I didn't want to be just a "lab rat," so I pursued my dream of getting an M.D. and a Ph.D.—at New York University School of Medicine—and, well, here I am. Clinical work is a great counterbalance to the pace and tenor of the lab.



### What got you interested in immunology?

As I was completing my M.D. training at Bellevue, I realized that many patients suffered from ailments that had, at their core, an immune system that had "gone wrong"—being either underactive (as in AIDS) or overactive (as in autoimmune diseases). I decided that if my work was to make a difference in people's lives, immunology was a good subject.

### What do you ultimately want to discover?

The hows and whys of autoimmune disease.

### What nonwork activities do you enjoy?

Tennis and downhill skiing. On most winter Sundays, I'm at the Dartmouth Skiway teaching 5-year-olds in the Team Spectra Program. I also love watching pro baseball and football; it's

easy this year to be an avid Red Sox and Patriots fan. I also like to read and spend time with my kids.

### Finish this sentence: If I had more time I would . . .

Develop a better net game in tennis to complement my good serve.

### What are your favorite books and movies?

I like to read mysteries and science fiction. Orson Scott Card is my current favorite sci-fi author. I like all sorts of movies. Some of my favorites are *The Sting*, the *Godfather* series, and *L.A. Confidential*.

### Hollywood is doing a movie of your life. Who plays you?

Jeff Goldblum. He makes a convincing scientist-type, and he's a lot taller than I am.

### What about you would surprise most people?

I'm a pretty good trumpet player. I used to play in a five-piece Klezmer band with another doc from DHMC, an M.D.-Ph.D. student, and two Dartmouth undergraduates. The undergrads got their diplomas and moved on, the other doc moved away, and, alas, we broke up. But, hey, so did the Beatles.

### What is the greatest frustration in your work?

The decline of federal funding for biomedical research. Unless we restore funding soon, the research infrastructure that was so carefully cultivated over the last 30 years will decay; then major advances, leading to quantum leaps in the understanding and treatment of disease, will be a thing of the past.

### Are there any common misconceptions about your field?

Many people confuse autoimmune hepatitis with viral hepatitis (like hepatitis C or B). "Hepatitis" refers to inflammation in the liver, which can be caused by infections, autoimmunity, toxins, alcohol, etc.

### What is a talent you wish you had?

Painting. When I walk down the hall at DHMC and see the beautiful work by local artists, I'm awed at the talent. I can't draw a straight line.

