NOT IN VEIN: Al Whitney, a 71-year-old retired factory worker from Ohio, aims to donate platelets in all 50 states. He made DHMC his Granite State stop, ticking off his 27th state on May 14. He began to donate blood in 1965.

of *Time*'s "100 Most Influential People in the World" in 2006.

Kim is no stranger to small towns, however. He grew up in Muscatine, Iowa, after immigrating with his family at age five from Korea. In high school, he was valedictorian and quarterback of the football team.

Groups: Though he has spent his career so far in health care—most recently as chair of the Department of Global Health and Social Medicine at Harvard—he believes that many of the lessons he's learned will be directly applicable to his new position at Dartmouth. In all of his global health endeavors, he has had to tackle "a fundamental problem," he says, "which is how do you get complex groups of people to achieve anything.

"You've got to have the science. Without the science you can't go anywhere." But you also have to figure out the best way to execute your goals, he adds, and that's where anthropology, engineering, business, and many other disciplines come into play.

JENNIFER DURGIN

JUSTIN IDE/HARVARD UNIVERSITY NEWS OFFICE

Kim, right, pictured in Lesotho, Africa, is the first Asian American named as president of an Ivy League institution.

FACING FACTS ABOUT BLOOD

The DHMC Blood Donor Program faced a mismatch. The population of people rolling up their sleeves and regularly donating blood was growing older and older. But program officials suspected there was a willingness among young people, including Dartmouth students, to give back to the community. The problem was that their standard recruitment methods didn't resonate with this audience.

Michelle Loveys Dozier, the program's marketing specialist, figured social marketing might be just the ticket. The founders of a new national nonprofit called Takes All Types (TAT) had exactly the same idea; they aimed to use Facebook's demographic linking capability to recruit blood donors. Dozier stumbled across TAT on Facebook, "learned that their mission and what we were hoping to accomplish were perfectly in line," and signed DHMC up as one of TAT's first two pilot sites in the country. "We have not seen a bump [in younger donors] as of yet," she says, "but expect to after the students return to [school] in the fall." A.S.

A PAINFUL CONCLUSION

Doctor-shopping and diverting drugs from their intended recipients—those may be ways two groups of New Hampshire residents are feeding their addiction to prescription opioids. So surmises a student who led the first-ever comprehensive analysis of New Hampshire deaths related to prescription opioids. The study was conducted by Laura Hester (pictured below), a geography major in the Dartmouth Class of '09. When she looked at age-specific death rates, she found that the greatest increase for men was among 18- to 24-year-olds and for women among 45- to 65-year-olds.

"The 18-to-24 [group] is worrisome," says Hester, because young people experience less chronic pain and thus are less likely to be prescribed opioids, such as Vicodin or OxyContin. So opioids prescribed to older adults are probably getting diverted to this younger group. In contrast, middle-aged women addicted to opioids are "most likely doctor-shopping," Hester says—going from doctor to doctor to get higher doses or more drugs. "So you have a law-enforcement problem in younger people and a prescribing-practices problem in older people," she concludes. (See the box at the top of page 11 for more on Hester's study.) J.D.

DMS faculty member heads national panel on opioid prescribing

"If you don't continue to prescribe to me, I will kill you." That's a threat that more than a few DHMC physicians have heard from patients addicted to prescription opioids, says Dr. Gilbert Fanciullo, director of DHMC's Pain Management Center. At least once a week, he adds, staff in the pain center need to use distress buttons—similar to those at banks—to call security when angry patients demand narcotics.

"Addiction is a terrible disease," Fanciullo admits. But so is chronic pain, which is often why people begin taking opioids—such as methadone, morphine, codeine, and oxycodone. To address the problem of addiction, Fanciullo has helped draft comprehensive guidelines, both nationally and at DHMC, for prescribing opioids. He cochaired a panel of experts from the American Pain Society and the American Academy of Pain Medicine that wrote new national guidelines published recently in the *Journal of Pain*.

Abusing: Doctors want to be "humane," says Fanciullo, and use opioids as appropriate to treat pain. But they also have to worry about "who is addicted to the drug, who is diverting the drug, who is abusing the drug, . . . and who is misusing the drug inadvertently."

About 27 million Americans suffer from severe chronic pain, according to the American Med-

CAPITOL ONE: In March, DMS's David Goodman, an expert on the physician supply, was invited to testify about health-care workforce issues before the U.S. Senate Finance Committee. For more about Goodman's work, see dartmed.dartmouth.edu/sp09/f03.

For a WEB EXTRA about undergraduate Laura Hester's study of opioid deaths, see dartmed.dartmouth.edu/su09/we05.

ical Association (AMA). Clinicians define chronic pain as pain that lasts beyond the usual course of natural healing—from surgery or injury, for example—and that is not associated with a terminal illness. Before the 1990s, opioids were rarely prescribed, even to terminal cancer patients, because of the fear of addiction.

Chronic: Since then, doctors have become more comfortable prescribing opioids for terminal patients, as well as for those with chronic pain, realizing that many patients can benefit from the drugs without becoming addicted.

Accidental narcotic overdose deaths rose 83% from 1999 to 2005.

"But misuse and related ill effects [have increased] as well," the AMA noted in a recent article. "The number of accidental overdose deaths from narcotics or hallucinogens among those 15-64 years old . . . increased 83%, from 5,921 in 1999 to 10,829 in 2005." (For insight into opioid-related deaths in New Hampshire, see "A painful conclusion" on page 10 and the web-extra in the box above.)

Estimates of the total number of Americans using opioids for chronic pain are not readily available. However, the FDA recently reported that in 2007, 21 million prescriptions for long-acting opioids were dispensed to about 3.7 million unique patients. Perhaps of more concern is the fact that 5.2 million people age 12 and older reported using prescription pain relievers for a nonmedical purpose in the past month, in a 2007 survey conducted by the Substance Abuse and Mental Health Services Administration.

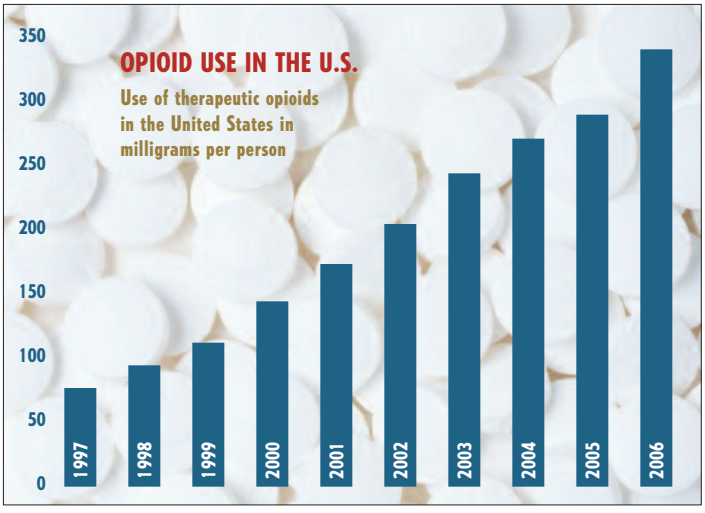
Such national trends seem to be showing up locally, says Fanciullo. Many primary-care practices in New Hampshire and Vermont have stopped prescribing opioids entirely, he says. This likely means that more patients are seeking opioids from DHMC—either to treat pain or because they are addicted, or both.

The Pain Management Center is not the only service experiencing this trend. Obstetrics and gynecology has seen an increase in the number of pregnant women on opioids, and the number of opioid-dependent newborns is increasing. Between October 2007 and October 2008, 67 babies admitted to or born at DHMC were diagnosed as being substance-exposed—about 10 more than in the previous 12 months. And Dr. Bonny Whalen, medical director of DHMC's newborn nursery, expects that number to increase to almost 100 this year.

Policy: For providers who treat adults, the national and DHMC guidelines offer advice on how to prevent the abuse and diversion of opioids. DHMC's guidelines include some policy changes, too. Patients prescribed opioids by a Dartmouth provider must now sign a form that outlines the risks and responsibilities associated with taking such drugs and signifies that they agree to undergo periodic urine drug screens in order to confirm that they are taking their medication as directed. The form also tells patients that there are other ways to effectively treat pain, such as physical therapy, psychotherapy, injections, operations, and nonopioid medications.

"Opioids are the final option," says Fanciullo. Or at least they should be.

Jennifer Durgin



The use of therapeutic opioids—natural opiates and synthetic versions—increased 347% between 1997 and 2006, according to this U.S. Drug Enforcement data.

THEN & NOW

A reminder of the pace of change, and of timeless truths, from the 1957-58 edition of the *Dartmouth Medical School Bulletin*:

"The medical library occupies the mezzanine floor of the Baker Library, where over 30,000 volumes have been segregated from the stacks. The current numbers as well as the bound volumes of over 300 periodicals devoted to the medical sciences are to be found in the journal room on this floor."

2
Number of biomedical libraries now (one in Hanover, one in Lebanon)

302,000
Volumes in the collection

>3,800
Number of electronic journal subscriptions

3 million
Hits on the biomedical libraries' website in FY08

SPINAL TAP: Dartmouth's first-in-the-nation Center for Shared Decision Making just celebrated its 10th anniversary. Over 4,000 videos and other "decision aids" were checked out of its library in 2008, with spine conditions the most popular topic.

A matchy-matchy day for the fourth-years

Before she began calling names and handing out Match Day envelopes to fourth-year medical students, Dr. Susan Harper, assistant dean for medical education, cited some statistics. There were cheers when she said diagnostic radiology was the top residency choice for the '09s, and more cheers when she said California and Massachusetts were the most popular destinations. But the loudest applause came when she said that every DMS student who participated in the Match had secured a spot. Then she and Dr. William Green, DMS's dean, started distributing envelopes one by one.

Rank: Similar ceremonies were taking place at schools all across the country. Every year, on the third Thursday in March, fourth-year medical students find out where they'll do their residency. In February, students list their preferences, and teaching hospitals rank their choices of students. Then a computer algorithm pairs students with hospitals. On March 16, the Monday before Match Day, the '09s learned if they'd matched at all, and on March 19 they found out where they're headed.

Every DMS student who participated in the Match had secured a spot.

This year, a total of 29,890 would-be residents, the most ever, participated in the Match. Not all secured a spot, as only 22,427 positions were available.

Despite the gravity of the occasion, DMS students were doing their best not to worry. "There's no point in being anxious about it, because it won't change anything," said Fuyuki Hirashima. But, she added, "it's hard not to think about it." Yasotha Rajeswaran said, "I was nervous for the past couple days, but today I'm more excited."

Name: Carolyn Presley was the last student called down the aisle to pick up her envelope. She was relieved when she finally heard her name, and even more relieved when the envelope contained good news. "I was so terribly nervous because I wanted to match at Yale, where my fiancé is a graduate student," she said. Before heading to New Haven, Presley will walk down another aisle—"we are getting married in May," she added.

The 63 DMS graduates will head for 19 different states, with Massachusetts and California claiming 11 each. After diagnostic radiology, which drew nine '09s, internal medicine and anesthesiology were the top choices; 17 students matched in primary-care fields. A list of all this year's matches is in the box on page 13.

Incoming: As the DMS '09s spread out across the country, DHMC prepared to welcome 76 incoming residents, including four DMS graduates. In addition, the New Hampshire-Dartmouth Family Medicine Residency will gain eight new residents, while 10 will begin their training at the Maine-Dartmouth Family Medicine Residency.

Amos Esty

ALL: JON GILBERT FOX

Match Day was full of dramatic moments, as 1 Susan Harper gave Peter Burrage his envelope; 2 Vasilena Zheleva opened hers amid a gaggle of friends; 3 Christopher Woehrstein celebrated with his fiancée; 4 Van-Khue Ton and Sword Cambron shared their news; 5 Yasotha Rajeswaran clapped for her classmates; 6 and Carolyn Presley and Dan Kaser reveled in the occasion. 7 The result of their four years of hard work in labs, classes, and wards? Their names in icing on the Match Day cake!

NO BOOB: When the *Today Show* tackled "the issue of too much cancer screening," health-care blogger Gary Schwitzer said, "thank goodness they had one of the best evidence-based minds on the set . . . Dartmouth's Dr. Gil Welch."

THEN & NOW

A reminder of the pace of change, and of timeless truths, from this magazine's Summer 1989 issue:

Dr. Robert Markison, DMS '74-5, wrote about the use of multimedia computing in medical education: "The creation of multimedia teaching materials involves the assembly of text, data, animation, and sound. . . . Multimedia computing is still a brand-new medium, just as 'talkies' were still new to the motion picture industry through the late 1920s."

2006
Year this magazine launched multimedia "web-extras" in its online edition

>1,500
Average monthly visits to the most popular web-extra

2008
Year that DM's web-extras won a national award

Physicians sink their teeth into dental care

Dr. Melanie Lawrence, a family physician in Bradford, Vt., is tired of seeing toddlers with teeth so decayed they need to be pulled. A few states over, in Maine, Dr. William Alto is "increasingly frustrated" that his patients often lack dental care because they can't afford it or can't get a dentist to see them.

Scope: Both Lawrence, an adjunct assistant professor at DMS, and Alto, a professor in the Maine-Dartmouth Family Medicine Residency, have taken action. The initiatives they're helping to spearhead are not related. In fact, until recently, they were unaware of each other's efforts. But both are aiming to improve the dental health of their patients, many of whom depend on Medicare or Medicaid or lack health insurance entirely. It's a new wrinkle for physicians, who used to consider patients' teeth to be beyond their scope.

Lawrence and her colleagues at Little Rivers Health Care are attacking the issue three ways:

- They revamped their well-child checkups to include a basic dental screening, thanks in part to the work of second-year DMS student Thomas Hoke.
- They're working with three other health centers in northern Vermont and Ronald McDonald House Charities to staff a mobile dental unit that will travel around the region and serve children and young adults up to age 21. The van is scheduled to go into service this fall.
- They're going to conduct an unusual pilot study in three elementary schools, where fourth-graders coach kindergarteners in oral health. It's funded by the Dartmouth Center for Clinical and Translational Science.

In the study, four fourth-grade classes will learn how to take care of their teeth by avoiding sugary foods and brushing and flossing correctly. Then two of the classes will prepare and give a presentation to kindergarteners. (The other two classes will be controls, to test the effect of having the older kids work with younger ones.) They'll use fake teeth to teach the kindergarteners how to floss and brush and show a PowerPoint presentation about oral health.

Mouths: In addition, the older kids will help the kindergarteners measure the plaque in their mouths by using disclosure tablets, chewable tablets that temporarily dye plaque red. And perhaps the best part for the fourth-graders will be dressing up in gloves and surgical masks.

"Any time you dress kids up in health-care paraphernalia, they get all excited and they think about what they are going to be when they grow up," says Lawrence, a former day-care director. "We're trying to hit a lot of things . . . role modeling a career [in health care] . . . a sense of social responsibility and teaching between students . . . and helping kids learn to take better care of their mouth." Lawrence and her colleagues will also be training the elementary schools' nurses, teaching them how to screen for dental problems.

Alto's patients often lack dental care because they can't afford it.

Under the watchful eye of Melanie Lawrence, center, fifth-grader Meghan Boardman, dressed up in doctor gear, checks out a kindergartener's teeth.

While Lawrence is tackling dental health by teaching youngsters, Alto and his colleagues in the Maine-Dartmouth Residency program are targeting doctors-in-training. The program, which is based in Fairfield and Augusta, Maine, may be the only one in the country that teaches physicians how to extract teeth and perform basic dental procedures, such as fluoride varnishes.

Maine-Dartmouth residents can also get an additional month of dental training at the Togus VA Medical Center in Augusta. That's thanks in part to a collaboration with dentist James Schmidt, now the president of

SIM CITY: Dartmouth's 8,000-square-foot simulation center is the third-largest such center in the nation. Health-care providers can practice procedures there on lifelike manikins programmed to bleed, cry, drool, and sweat.

THEN & NOW

A reminder of the pace of change, and of timeless truths, from a 1943 book titled Fifty Years of Service: *A History of the Mary Hitchcock Memorial Hospital*:

"As early as 1776, mention is made of [a hospital] 'located in the Lebanon woods.' . . . During the next year, the college mill on Mink Brook, just below the bridge on the Lebanon road, was converted temporarily into a hospital. These, however, were isolation centers rather than hospitals in the true sense. . . . As a result of . . . the fear that these hospitals might serve as centers of contagion . . . neither served its purpose for very long."

1893

Year Mary Hitchcock Memorial Hospital opened

225

Acreage of the wooded site in Lebanon where the Hospital is now housed

DHMC develops a "green" yardstick for hospitals

It sounds like it must be a very good, "green" thing for a hospital to calculate its ecological footprint, but what exactly does that mean? It's a process DHMC recently went through, so John Leigh, manager of waste and recycling, is very familiar with the concept. He explains that an ecological footprint is "a measure of natural resources consumed as compared with the Earth's ability to regenerate those resources." To achieve sustainability, a population shouldn't consume more than its proportional share of those resources.

The Earth contains 28 billion productive acres, such as forests and croplands (which excludes deserts, polar areas, and some ocean areas). Dividing that acreage by the Earth's population, 6.8 billion, gives 4.1 acres for each person (which doesn't even factor in the 25 million other species on the planet).

Rise: "We now know that humans are exceeding the biocapacity of the Earth by about 24 percent," says Leigh. "We began to overshoot it in the mid-1980s, and we can reliably predict that the overshoot rate will continue to rise because the population is growing, the per-capita consumption rate is growing, and technology continues to drive our consumption ability."

The calculation of an ecological footprint is a complicated process. Leigh led the development of the spreadsheet-based tool that allowed DHMC to calculate its footprint, thanks to a grant from the Maverick Lloyd Foundation. He broke the institution's environmental impact into seven categories: products, energy, food, waste, transportation, water, and built land.

Gas: Some measurements are firmer than others. For example, experts agree on the greenhouse gas emissions associated with consuming electricity and fuel oil, and DHMC engineers have tracked energy consumption for years. It was much harder to get a handle on the impact associated with the wide variety of products that a major medical center uses—from disposable rubber gloves to massive imaging machines.

The calculation of an ecological footprint is a complicated process.

When all the best measurement models and conversion factors were settled on and applied to DHMC's calculation, the result was 13.8 acres per full-time-equivalent employee—of which there are 5,700 on the Lebanon, N.H., campus. And that doesn't even factor in the resources that all those employees consume at home.

So how does that figure compare to other hospitals? That's a good question, but it's one for which there is, as yet, no answer. DHMC is so far ahead of the curve that no other U.S. hospital has calculated its footprint. Leigh is offering the tool he developed to other hospitals, but no one has completed the process yet.

Meanwhile, Leigh has already begun to apply the results of the calculation. For example, one startling finding was that 32% of the overall impact came from transportation. That includes by patients, visitors, and staff, with staff transportation to and from work the biggest factor. The average one-way commute to work for DHMC employees is nearly 42 miles.

The Medical Center already helps underwrite the local bus system, Advance Transit; has supported the construction of nearby affordable housing; and has taken other steps to minimize commuting. But Leigh would like to see more done in this area. As the Medical Center considers its options, he can now plug data associated with differ-

JON GILBERT FOX

John Leigh is the manager of waste and recycling at DHMC.

BODY OF KNOWLEDGE: Over the past 12 years, more than 15,000 New Hampshire fourth-graders have learned about their bodies and how to care for them, thanks to a program supported by the Dartmouth-Hitchcock Clinic called Granite State Fit Kids.

Finding "grace and guts" at the bedside

It would have been understandable if Ellen Stern had decided she'd spent enough time at sickbeds. But the day she saw a newspaper ad saying that DHMC was establishing a volunteer palliative-care program, she was determined to apply.

Stern's mother had just died, and many years earlier she'd supported a cousin who was dying of pancreatic cancer. "He died really hard," she says. "But he wanted me a part of his process. . . . I was holding his hand when he crossed over. . . . He was at peace and not hurting any more."

The two experiences taught Stern that "if a patient is diagnosed with a terrible illness, it isn't bang, the end. . . . If you're lucky, you have some time . . . to get your priorities in order."

Help: It was to help people like her mother and cousin that she enrolled in DHMC's No One Alone program back in 2006. Volunteers like Stern—there are now 27—support the work of DHMC's Palliative Care Program, which focuses on improving the quality of life for patients with a serious illness or injury. The volunteers spend time with patients during long hospital stays, when people often feel lonely, bored, or isolated; they sometimes interact with patients' family members as well. Dr. Ira Byock, DHMC's director of palliative care, says the people chosen as volunteers "have to have a degree of emotional maturity and sensitivity to make use of the privilege of being at the bedside."

Volunteers "have to have a degree of emotional maturity," says Byock.

Few: The U.S. has about 1,300 hospital-based palliative care programs; DHMC's is one of only a few that uses volunteers. Wendy Sichel, the director of No One Alone, screens applicants carefully, assessing their "motivation, emotional maturity, tolerance, warmth, and empathy," she explains. Not every volunteer has all those qualities in equal measure, but "I do want to see that they have empathy," Sichel says. "I try to sense that they're people-people." Applicants are also asked to write an essay about losses in their life.

MARK WASHBURN

Cecilia Hoyt, left, is active at DHMC in one of the nation's few hospital-based palliative-care programs to use volunteers.

Those who are selected as volunteers undergo 20 hours of training from the palliative care team—doctors, nurses, a social worker, a chaplain, and Sichel and Byock. They learn how the team manages patients' pain, as well as about advanced directives, spirituality at the end of life, and grief and bereavement. After volunteers complete the training, they are accompanied for a while by an experienced volunteer until they are comfortable seeing patients on their own.

"I don't do it to collect any rewards," explains Cecilia Hoyt, another No One Alone volunteer. "I do it out of the need to love and help those people and be able to make life a little more comfortable, easier. . . . It helps you to grow and mature and look at life through different eyes."

Both Hoyt and Stern have also spent time with families of patients near death. Once, says Stern, she was with a mother as her young son was taken off life support. "I literally had to hold her up," Stern says. "But we got through it—she got through it. . . . I felt that day like—I don't know how I felt, but I knew I had made a difference.

Guts: "I've been learning how to put death in its place as part of our being," she adds. "I'm learning grace from people that I see. That word keeps coming out—it's grace. And guts." One patient she spent a lot of time with, Stern adds, "I used to call . . . my Xena warrior princess."

MATTHEW C. WIENCKE

THEN & NOW

A reminder of the pace of change, and of timeless truths, from the 1981 *DHMC Annual Review*:

"Hemodialysis, the use of an artificial kidney machine to remove toxic wastes from a patient's bloodstream, has extended life for thousands of people whose kidneys have failed. . . . 'As recently as 24 years ago, if both kidneys failed the person was sure to die,' stated Frederick Appleton, M.D., medical director, Dialysis Unit. . . . A five-station hemodialysis unit opened at Mary Hitchcock in November 1980."

>150

Radius in miles of the area from which the DHMC Chronic Dialysis Unit currently draws patients

10

Number of specialists in kidney disease and transplantation at DHMC

HAND-Y DEVICE: DHMC just acquired a 1.5-tesla MRI machine designed to scan extremities. It's as powerful as a whole-body MRI, but patients who need to have only a wrist, arm, or ankle scanned don't have to be confined in the bore of a closed MRI.

A new organization is born in Kosovo

By the time the fighting between Serbian forces and the Kosovo Liberation Army finally stopped in 1999, Kosovo's health-care system—like nearly everything else in the region—had been devastated. In 2000, Kosovo's perinatal mortality rate was 29.1 deaths per 1,000 births, compared to about 7 per 1,000 in the U.S.

Labor: Thanks in part to the efforts of DMS faculty members, the situation since then has changed. By 2006, the perinatal mortality rate had dropped to 23.2 per 1,000, and prenatal care was more common. "Until recently, most pregnant women didn't even see their obstetricians until they went into labor," says Dr. James Strickler, a professor emeritus and former dean at DMS. There was no "regular, systematized" prenatal care, he says, adding that instituting such care is "one of the things we did."

Today, Kosovo is home to a new nonprofit organization dedicated to improving medical care for newborns and pregnant women—the Foundation for Healthy Mothers and Babies. Strickler is a charter member of the foundation's board. He first became involved in Kosovo in 1999, after visiting refugee camps filled with Kosovars who had been forced to flee their homes because of the fighting.

Train: He, with Drs. Dean Siebert and Joseph O'Donnell and other members of the DMS faculty, started a student exchange program with Kosovo's only medical school. A group of orthopaedic surgeons from Dartmouth soon became involved as well, helping to train Kosovar physicians.

In 2004, DMS expanded its engagement in the region by starting a pilot project focused on primary care for women and infants in one city. When it proved successful, similar efforts got under way in other cities throughout Kosovo. Before long, the program had acquired a formal name—the Kosovo-Dartmouth Alliance for Healthy Newborns—as well as financial support from the U.S. Agency for International Development (USAID).

Until recently, Kosovar women received no regular prenatal care.

Aid: Despite the successes, Strickler had a lingering concern. "As all of this was evolving, I was constantly focusing on what happens after USAID money disappears," he says. To make the progress sustainable, he wanted to create a permanent organization, one based in Kosovo. The new foundation is the result. Strickler says that it's now operational, with a recently hired executive director and a board of trustees that includes some prominent Kosovars.

In the near term, the organization's goals include projects such as raising money for medical equipment—a centralized oxygen distribution system for the obstetrics hospital in the capital, Pristina, for example.

Develop: In the long term, the foundation will continue the work started by the Kosovo-Dartmouth Alliance. "What we want to do is develop training and education programs in neonatal intensive care and for the care of pregnant women," Strickler says.

Strickler is optimistic, thanks to the foundation, that the efforts of DMS faculty over the past decade will pay off for many more years to come. He emphasizes that the success has been possible only because of the involvement of so many people from throughout the DMS community. "I'm the guru," he says, "but the other members of the team do the meaningful work."

AMOS ESTY

EMMA GJEMNICA

This neonatal ICU in Pristina, Kosovo, is a result of a decade-long collaboration between DMS and Kosovar physicians.

Repercussions of the global financial collapse at DMS and DHMC

Academic medical centers all across the country, including Dartmouth Medical School and Dartmouth-Hitchcock Medical Center, are taking steps to maintain their fiscal health in light of the global financial collapse.

Margin: According to Dr. Joanne Conroy, chief health officer of the Association of American Medical Colleges, patient volumes are rising at teaching hospitals, especially in the Northeast, but there hasn't been a corresponding increase in revenue. "Hospitals are really struggling to maintain their operating margin," she says. As a result, many institutions have had to impose layoffs, hiring freezes, or employee furloughs, and almost all have put some capital investments—such as the construction of new buildings—on hold.

"In many respects, DHMC has been very lucky in comparison with many institutions," says Medical Center spokesperson Jason Aldous. He notes, for example, that DHMC has been able to avoid laying off any of its approximately 6,500 employees.

Value: "That said, we have not escaped unscathed," Aldous continues. Over about a six-month period as the stock market tumbled, DHMC's investment portfolio lost about 25% in value. This caused a number of capital projects to be scaled back or deferred. But DHMC is continuing as planned with some projects, including the construction of an

NUMBERS GAME: ***Know Your Chances: Understanding Health Statistics,*** **by three DMS faculty members, was described by health-care blogger (www.healthbeatblog.org) Maggie Mahar, also a DARTMOUTH MEDICINE contributor, as "fact-filled, funny, and very persuasive."**

Worthy of note: Honors, awards, appointments, etc.

Jay Dunlap, Ph.D., chair of the Department of Genetics, was elected to the National Academy of Sciences, the nation's premier scientific society. He is internationally recognized as a pioneer in the field of clock biology; his research has advanced understanding of the genetic basis of the 24-hour cycle that governs biological activity in all living beings. He cloned the first microbial clock gene in 1986 and was the first to demonstrate how light and dark cycles reset the circadian clock.

John Wennberg, M.D., M.P.H., the Peggy Y. Thomson Professor of the Evaluative Clinical Sciences, was honored as a 2009 Public Health Hero by the University of California-Berkeley School of Public Health, for his leadership in improving U.S. health care.

C. Everett Koop, M.D., Sc.D., the Elizabeth DeCamp McInerny Professor of Surgery and former U.S. Surgeon General, received Research America's 2009 Raymond and Beverly Sackler Award for Sustained National Leadership, honoring his longtime commitment to public-health advocacy.

James Weinstein, D.O., a professor of orthopaedic surgery and director of the Dartmouth Institute for Health Policy and Clinical Practice, has been appointed to DMS's Third Century Professorship.

H. Gilbert Welch, M.D., a professor of medicine, received the 2009 Under Secretary's Award for Outstanding Achievement in Health Services Research from the Veterans Administration, for his work in improving the overall health of veterans and the quality of care they receive and for his contributions to VA health-services research.

Joyce Deleo, Ph.D., the chair and Irene Heinz Given Professor of Pharmacology and Toxicology, was the recipient of the American Pain Society's 2009 Frederick W. L. Kerr Basic Science Research Award.

Ann-Christine Duhaime, M.D., a professor of surgery, was appointed to the editorial board of the *Journal of Neurosurgery: Pediatrics*. She is the first woman to serve on the publication's board.

Harold Sox, M.D., an adjunct professor of medicine and editor of the *Annals of Internal Medicine*, was named chair of the Institute of Medicine's Committee on Comparative Effectiveness Research Priorities.

William Wickner, M.D., a professor of biochemistry, has been named to a National Institutes of Health editorial panel on basic sciences that will prioritize proposals for funding submitted under the challenge grants available through the American Recovery and Reinvestment Act of 2009.

Charles Mannix, J.D., chief operating officer of DMS and an assistant professor of medicine, received the Uniformed Services University of the Health Sciences' 2009 Barry Goldwater Service Award for his contributions to the university's Department of Surgery.

Lori Arviso Alvord, M.D., an assistant professor of surgery, received an honorary degree from Pine Manor College.

John Modlin, M.D., the chair of the Department of Pediatrics, recently received an Excellence in Immunization Award from the New Hampshire Department of Health and Human Services, with special recognition for Excellence in Provider Education.

Sean Hunt, M.D., an assistant professor of anesthesiology, was recently elected to the board of directors of the American Society of Anesthesiologists.

continued on page 62

New on the bookshelf: Recent releases by DMS faculty authors

Ethical Issues in Neurology. By **James Bernat**, M.D., professor of neurology; Lippincott Williams & Wilkins; 2008 (third edition).

After the War Zone: A Practical Guide for Returning Troops and Their Families. By Laurie Slone, Ph.D.; and **Matthew Friedman**, M.D., Ph.D., professor of psychiatry; Da Capo Press; 2008.

Comprehensive Review of Headache Medicine. Edited by **Morris Levin**, M.D., associate professor of medicine; Oxford University Press; 2008.

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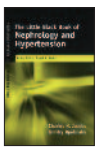

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