

For a **WEB EXTRA** link to more photos of the inauguration events, plus videos and the text of some of the speeches, see dartmed.dartmouth.edu/w09/we04.

HE'S A JOLLY GOOD FELLOW

Dr. C. Everett Koop has racked up oodles of honors and awards over the years. The U.S. surgeon general from 1982 to 1989, he has racked up lots of years, too. A Dartmouth College '37 and a member of the DMS faculty since 1992, Koop turned 93 on October 14. The day before his birthday, he received one more tribute—honorary fellowship in the Royal College of Surgeons of Edinburgh (RCSE), in recognition of the fact that before being named surgeon general he was a pioneering pediatric surgeon. Dr. John Orr, the RCSE's president, traveled to Hanover to bestow the honor in person. A.S.

JOSEPH MEHLING



From the left are Dartmouth President Jim Yong Kim, honoree C. Everett Koop, presenter John Orr of the Royal College, and DMS Dean Bill Green.

Inauguration was colorful, solemn, festive, diverse

Colorful, certainly. Solemn, for sure. Thought-provoking, absolutely. Festive, no question. And diverse—oh, yes, definitely diverse.

There are lots of adjectives one might apply to the two days of inauguration festivities celebrating Dr. Jim Yong Kim's assumption of the Dartmouth presidency, but diverse is one that definitely belongs on the list.

Office: For starters, there is the fact that Kim became the first Asian-American president in the Ivy League when he took office on July 1. He's also the first M.D. to hold the Dartmouth presidency (in addition, he has a Ph.D. in anthropology).

Then there's the fact that the attendees at the September 21 and 22 inauguration events ranged from purple-haired stu-

dents to white-haired guests of honor, and their garb from shorts and sundresses to blue blazers and Chanel suits.

The diversity of the events themselves ran deep, too, comprising in essence a syllabus of the liberal arts.

An afternoon panel discussion focused on "leadership for social change." An evening event celebrated Dartmouth's strength in the arts. A series of dinners brought carefully selected slates of guests together to talk about important issues facing society, from health-care reform to energy policy.

And the inauguration itself included a diversity of music—from an honor song performed by Dartmouth's powwow drum group, to the spiritual "My Lord What a Morning" sung by the Dartmouth Glee Club; of tradi-

Jim Yong Kim is the first M.D. to hold the Dartmouth presidency.

KIDNEY SWAP MAKES HISTORY

If someone you loved was in urgent need of a kidney, you might well donate one of yours. That's exactly what a man from Milford, N.H., wanted to do for his brother. But unfortunately, the brothers weren't a match for each other. Thanks to a four-way swap, however, the Milford man's brother got a new kidney, while his own was transplanted into a stranger. Two more willing donors and grateful recipients completed the complex cascade.



Paired kidney exchanges aren't new; the first one was done at Johns Hopkins in 2001. But the New Hampshire brothers—whose surgeries were done at Dartmouth-Hitchcock—were part of one of the nation's first multihospital paired exchanges. The first, involving three institutions, took place in February 2009. The July 15 swap that included DHMC was the first to involve four institutions; the other three were Yale-New Haven Hospital and Boston's Beth Israel Deaconess and Brigham and Women's Hospitals. R.E.G.

ALL: JOSEPH MEHLING



Kim (left) was joined on the dais by a number of dignitaries, including (front row, from Kim's left) Dartmouth's outgoing president, James Wright; Ruth Simmons, president of Kim's undergraduate alma mater, Brown University; New Hampshire's governor, John Lynch; and Paul Farmer, a Harvard Medical School classmate of Kim's.



ON CLOUD NINE: *U.S. News & World Report* noted that “among elite centers in the *U.S. News* ‘America’s Best Hospitals’ rankings that reported patient satisfaction survey results for . . . 2008,” Dartmouth-Hitchcock had the ninth-highest rank in the nation.

For several **WEB EXTRAS** related to the Tanzer Symposium—a personal account by one attendee and several videos—see dartmed.dartmouth.edu/w09/we02.

tions—from the pageantry of the academic procession, to the solemnity of the transfer of the original College charter; and of speeches—including by noted global health activist Dr. Paul Farmer and Kim himself. Kim called on Dartmouth students to unite “learning with action, pas-

sion with practicality” and invoked one of his predecessors as president, John Sloan Dickey, in urging them to “embrace the world’s troubles as your own.”

Food: Finally, all the attendees enjoyed a gustatorily diverse array of international food.

ALAN SMITHEE

Below, a traditional Korean ensemble led the academic procession. Right, the honor of carrying the Dartmouth flag went to DMS pharmacology-toxicology graduate student Tina Chang, the president of the Graduate Student Council.



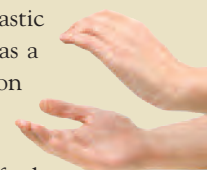
Over 5,000 people thronged the Dartmouth Green for the inauguration ceremony.

A BIG HAND FOR EAR FEAT

For a journal article still celebrated as a milestone half a century after its publication, it bears a downright unassuming title: “Total reconstruction of the external ear.” Shouldn’t such a significant treatise contain the word “breakthrough”? Or at least a few polysyllabic medical terms?

But the author of that article wouldn’t have had it any other way. Dr. Radford Tanzer, a member of the DMS faculty from 1937 until his death at age 97 in 2003, may have figured out how to replace a missing external ear. And that feat may have earned him the first standing ovation ever granted a presenter at a meeting of the American Society of Plastic and Reconstructive Surgeons. Yet Tanzer was a soft-spoken stickler for detail who focused on his work, not on the glory it brought him.

So he might have been embarrassed by the encomiums heaped upon him during the Radford C. Tanzer, M.D., Plastic Surgery Symposium, held in October to mark the 50th anniversary of his landmark article. But he’d surely have been pleased that surgeons came from around the world to attend the event—and that the program made note of his “qualities of integrity, humility, and passion.”



A.S.

ALL THE WORLD’S A VILLAGE

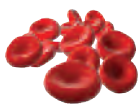
Just as it takes a village to raise a child, it takes engineers, accountants, and social scientists—not just medical professionals—to treat the sick and prevent disease worldwide. That’s the premise behind the new Dartmouth Global Health Initiative. DMS and Dartmouth’s Dickey Center for International Understanding are overseeing the program, to which the National Institutes of Health recently awarded \$250,000.

It will involve the development of new curricular offerings for undergraduate and graduate students, overseas research opportunities, and symposiums on global health. Students who complete a series of courses will be eligible to receive a Certificate in Global Health.

“The problems of global health are complex,” says DMS’s Dr. Lisa Adams. “We need to be providing a knowledge base to a wide range of professionals.” She and DMS’s Dr. Ford von Reyn will head the program, which will begin with a course in spring term on Essentials in Global Health Research. An elective on child health and survival, geared to medical students but open to all Dartmouth students, is also in the works, as is a conference also slated for this spring.



BLOOD RELATIVE: Dartmouth-Hitchcock runs its own blood donor program. About 90% of people will require a blood transfusion at some point during their life, and of the 90% about 40% are eligible to donate blood—but only 5% of them actually do.



THEN & NOW

A reminder of the pace of change, and of timeless truths, from the Fall 1986 issue of this magazine:

Drs. Justin and Maj Stormo Gipson, DMS '82s, wrote about their young family's stay in Nicaragua: "We live and work in Jinotega, an agricultural center. . . . The vast majority of health problems here (as throughout the Third World) stem from public health problems. . . . Diarrhea, with subsequent dehydration, is the number-one cause of death in children. Parasites are rampant, and malnutrition continues to be a problem, especially in bottle-fed infants."



10

Number of years DMS otolaryngologist Dr. James Saunders has been aiding Jinotegans (see page 26 for more on his work there)

Feds put dollars behind the push for quality

In the third year of a federal demonstration project aimed at improving care by attaching financial incentives to quality measures, the Dartmouth-Hitchcock Clinic again earned a bonus from the government.

Care: The Clinic is one of 10 multispecialty group practices participating in the Centers for Medicare and Medicaid Services Physician Group Practice (PGP) Demonstration. The project is designed to reward PGPs for improving the quality and efficiency of care provided to Medicare beneficiaries. Dartmouth-Hitchcock earned \$3.6 million for its performance in 2007-08, the project's third year, whose results were just announced.

During each of the demo's five years, a PGP can earn a payment if its rate of spending on Medicare patients rises more slowly than the rates of other providers in their area. If the rate lags enough, the government shares up to 80% of its savings with the PGP, depending on how well the group meets several quality goals. In year two, four of the 10 PGPs—including Dartmouth-Hitchcock—generated enough savings to receive payments. (For more on the second year's results, see dartmed.dartmouth.edu/w08/v03.) In the third year, five of the 10 PGPs got bonuses.

Targets: Various quality goals are being phased in during the five-year demo. In year three, five targets for hypertension and cancer screening were added to the first two years' benchmarks—which were for diabetes, con-

gestive heart failure, and coronary artery disease. All 10 PGPs met at least 28 of the 32 total goals in year three.

Dr. Martin Sedlacek, a nephrologist at DHMC, led the effort to meet the blood pressure goals. He studied how to best apply national guidelines for measuring and treating high blood pressure across the Clinic. One of the most important steps was to reeducate staff on the complexities of measuring blood pressure. Readings can be affected by factors such as cuff size, the position of the patient's arm, and how the patient's sleeve

is arranged. Accurate measurements are critical because blood pressure is "a big predictor for future trouble," says Sedlacek.

Despite these efforts, the Clinic missed two of the three hypertension goals. Most patients had their blood pressure



The pressure was on to meet several hypertension goals as part of a federal demonstration project; at Dartmouth-Hitchcock in 2007-08, 98.5% of patients had their blood pressure checked.

measured, but not enough had their pressure under control (defined as less than 140/90). And not enough patients with elevated blood pressure were given a plan of care.

"Our ambition is to do the right thing every time when the patient comes in," says Sedlacek. "This requires a continuous effort." Dartmouth-Hitchcock is not trying to meet the government goals simply to get the bonuses, he adds, but "because it's the right thing to do."

Actually, the jury is still out on whether pay-for-performance initiatives like the PGP demo are the best way to improve the quality and efficiency of

care. After three years, four of the 10 PGPs in the demo haven't received any performance payments. In fact, one of the groups that met all of year three's 32 quality goals didn't earn a payment because it hadn't kept costs down sufficiently.

Seminal: But for Dartmouth-Hitchcock, participating in the demo has been "seminal," says Dr. Barbara Walters, senior medical director of the Clinic and the project's coordinator. It has even resulted in a pilot program with CIGNA that applies the demo's framework to commercially insured patients.

Furthermore, the demo has led to dialogue among the PGPs, Walters says. The 10 groups have a monthly virtual meeting to share best practices, and the other participants are now "valued colleagues," she says.

KATHERINE VONDERHAAR

KING OF GORE: Best-selling horror writer Stephen King gets the gore right. For 35 years he has relied on a physician's assistant trained at Dartmouth, says *Wired* magazine, for such details as what bone dust smells like and how to cauterize a wound using a blowtorch.



FACTS & FIGURES

A clean sweep

1.8 million

Square feet of cleanable space at DHMC

162

Full-time equivalent (FTE) staff who keep that space clean

337,376

Total hours annually that they spend cleaning

11,097

Square feet per day cleaned by each FTE
(that's an area equal to 4.4 average-sized U.S. houses)



1,531

Tons of trash (non-recyclable, non-hazardous waste) generated in 2008

1,020

Tons of recyclable waste generated in 2008

341

Tons of hazardous waste and "sharps" generated in 2008

\$150,000

Approximate cost (not including labor) of disposing of the trash

\$50,000

Approximate net revenue from the recycling program

\$234,000

Approximate cost of disposing of hazardous waste and "sharps"

SOURCE: DARTMOUTH-HITCHCOCK MEDICAL CENTER

Putting some numbers into the kids-food equation

In today's ad-saturated world, what does it take to get youngsters to eat healthy food, avoid sugary drinks, and exercise regularly? At least as much thought as money on the part of schools, parents, and local businesses, judging from the work of the Community Health Research Program (CHRP) at Dartmouth's Hood Center for Children and Families.

As part of a five-year study of environmental and family influences on overweight adolescents, CHRP researchers led by Madeline Dalton, Ph.D., visited school cafeterias; quizzed kids, their parents, and school officials; and scouted close-to-campus food options in two dozen New Hampshire and Vermont communities—most of them small towns. In April of 2009, they issued a 38-page report of their findings and distributed it to secondary schools and public-health organizations throughout the states.

Surprise: Did anything surprise the researchers? "In rural areas, where most kids do not walk or bike to school, creating daily opportunities for physical activity on the school grounds immediately before or after school may be a more effective strategy than focusing on active travel initiatives, which are more relevant to urban areas," says CHRP's Meghan Longacre, Ph.D.

"Further, convenience stores represent the vast proportion of all food outlets in rural towns—

compared to urban areas, [where] most food outlets are restaurants." So, she adds, "improving the healthfulness of the community food environment should target different types of outlets, depending on town size."

On the subject of *student size*, 28.9% of the more than 1,600 8th- to 12th-graders surveyed reported being overweight—as defined by the body-mass index (BMI) standard of the Centers for Disease Control and Prevention. In a 2007 survey, the national average was 28.8%.

There has been "a threefold increase in overweight among children and adolescents over the past 30 years," according to the report. About 18% of 6- to 19-year-olds are now obese, and another third are overweight. As a result, the report points out, the life expectancy of today's children may be less than that of their parents.

The researchers observed a range of approaches to addressing the in-school "food environment"—some communities and schools do it more systematically than others.

"New Hampshire is one of only nine states nationwide with a statewide action plan to promote healthy eating and active living, called the HEAL Initiative," Longacre says. "Our research team is currently partnering with HEAL to develop a statewide collaboration that would enable communities to use evidence-based tools, re-

LAB-ORIOUS ENDEAVOR: The Dartmouth-Hitchcock Medical Center clinical pathology laboratory performs 2 million tests every year and employs about 200 pathologists, clinical laboratory scientists, technicians, and clerical staff.



THEN & NOW

A reminder of the pace of change, and of timeless truths, from a 1987 booklet titled *Norris Cotton Cancer Center History: The Early Years*:

“The first cancer center building—a two-story cement structure, located entirely underground, with three-foot-thick walls to shield new multi-million-volt radiation therapy equipment—was completed [in 1972]. . . . Personnel needs were also addressed. The plans called for [recruiting] a third radiation therapist.”



5

Sites where Norris Cotton Cancer Center facilities are now located

200,000

Square feet at its main facility in Lebanon, N.H.

7

Number of radiation oncologists now on the staff

A high-tech solution to drug counterfeiting

Imagine picking up some teething syrup at the pharmacy, giving it to your toddler, and then discovering it had been laced with a toxic chemical normally used in antifreeze. The parents of 84 Nigerian children who died last year don’t have to imagine that nightmare. But if Dartmouth graduate student Ashifi Gogo has his way, it won’t ever happen again.

Horrific: Such problems arise when drug counterfeiters use cheap but often toxic fillers to extend their profits. In the case of the teething syrup, the toxic chemical was diethylene glycol, which looks, tastes, and smells like glycerin, a common component of such syrups. It’s just one of thousands of horrific examples of counterfeit drugs sold in Nigeria and Ghana—including fake antibiotics and antiretrovirals. The World Health Organization estimates that more than a million people die of malaria every year and that 200,000 of those deaths could be prevented if all counterfeit antimalarials could be eliminated.

Gogo, a native of Ghana and a Ph.D. student at Dartmouth’s Thayer School of Engineering, has developed a way to circumvent the massive fake drug industry and protect people from its harms. It’s based on ordinary cell phones, which are very common in Nigeria and Ghana.

As part of Thayer’s Ph.D. innovation program, Gogo founded his own company, Sproxil,

By 2010, sales of fake drugs could reach \$75 billion worldwide.

which uses cell phone technology to verify if a drug is real or fake. The concept is simple: before distributing the drugs, the pharmaceutical company applies to the package a scratch-off label with a unique ID number. The consumer texts the ID to a phone number.

The ID is then sent to a central drug data depository in the U.S. A text message comes back automatically, telling the consumer if the drug is real or fake and its correct name, manufacturer, and dosage. The message also includes advertising discounts from the manufacturer, offsetting the cost of the text message. The technology works anyplace that has cell phone coverage.

Gogo tested the concept by distributing a survey about Sproxil, with a sample drug and scratch-off panel, to 1,000 people in Accra, the capital of Ghana. Just 413 of the survey respondents were aware of fake drugs in Ghana, and only 152 suspected they had ever bought a fake drug.

Trial: Next Gogo undertook a major trial in three large cities in Nigeria, by coding “one million units of the nation’s most popular diabetic drug,” he explains. “This is the largest trial of scratch-off technology that I’m aware of.”

Fortunately for Gogo,

Nigeria’s National Agency for Drug and Food Administration has been cracking down on counterfeit drugs since 2001. And the agency is quite supportive of the Sproxil technology, since it works well alongside the agency’s other strategies, which include stricter importation regulations and training courses for pharmacists.

Most counterfeiters, says Gogo, are former narcotic dealers who turn to counterfeiting because the profits are huge and the penalties lenient compared to those for dealing narcotics. The U.S.-based Center for Medicines in the Public Interest estimates that by 2010, sales of fake

JON GILBERT FOX



Dartmouth graduate student Ashifi Gogo has developed a system that allows consumers to detect counterfeit drugs—a huge problem in some parts of the world—using a cell phone.

I NEEDED THAT!: Two special-needs volunteers at DHMC—**Lauren Guay** (the subject of the Editor’s Note in the Fall 2009 issue of this magazine) and **Tracy Bleyler**—received the **Edith Amsden Volunteer of the Year Award** from the **DHMC Auxiliary**.



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

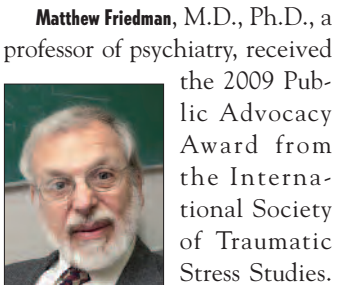
A former and a current member of the Dartmouth College Board of Trustees were recently elected to the prestigious Institute of Medicine (IOM). **Susan Dentzer**, a DC ’77 and the editor-in-chief of the journal *Health Affairs*, became only the second journalist in history elected to the IOM. She was a Dartmouth Trustee from 1993 to 2004 and chaired the Board from 2001 to 2004—the first woman to do so. She is currently a member of the DMS Board of Overseers. Also tapped by the IOM



was **John Rich**, M.D., a DC ’80 and a Dartmouth Trustee since 2008. He is a professor of health management and policy at Drexel University’s School of Public Health.



Matthew Friedman, M.D., Ph.D., a professor of psychiatry, received the 2009 Public Advocacy Award from the International Society of Traumatic Stress Studies. He is executive director of the U.S. Department of Veterans Affairs’ National



continued on page 59

CHaD events were “super” to the “extreme”

The Children’s Hospital at Dartmouth (CHaD) doesn’t do things by half measures—even (or maybe especially) when putting on a half marathon. Calling the 4th Annual CHaD Half Marathon “super” and another recent CHaD fund-raiser “extreme” isn’t indulging in hyperbole, it’s just being factual.

The organizers of the August 29 half marathon used the event

as a springboard to try to break the Guinness World Record for the most superheroes in one place at one time. They invited runners, volunteers, and spectators to come costumed as a superhero, to highlight the heroism of CHaD’s young patients. The villain of the day was the weather—it drizzled most of the

afternoon—but nevertheless the Guinness record fell before the might of 1,016 caped crusaders. And CHaD ended up nearly \$230,000 to the good.

A month later, the family of a CHaD patient did a star turn on ABC-TV’s *Extreme Makeover: Home Edition*. Eight-year-old Cameron Marshall’s battle with leukemia was just one of the reasons his family was picked by the show to get a new house.

The Guinness record fell before the might of 1,016 caped crusaders.

Positive: It was a fitting choice, however, for after young Cam learned his blood type was B-positive, he decided that would be his mantra: “be positive.” He’s done that by lending his name to a one-mile kids’ race—Cam’s Course—that has now become part of the half marathon. And a walkathon the week of the house-raising raised an additional \$27,000 for CHaD.

ALAN SMITHEE

TOM MCNEILL



The Marshall family, above, modeled B-positive t-shirts at the race. A month later, they got a new house from the *Extreme Makeover* reality TV show.

MAPLE LEAF PHOTOS



MAPLE LEAF PHOTOS



Over 1,000 superheroes braved a drizzly day to set a Guinness record for CHaD (right), and some half-marathoners even ran in superhero garb (above).

MAPLE LEAF PHOTOS

