

**REEL-TIME:** A webcam atop DMS's Dana Library offers a bird's-eye view of the soon-to-be Life Sciences Center. To see the construction site, plus a time-lapse video of the demolition of Strassenburgh Hall, go to [www.dartmouth.edu/~biomed/webcam.html](http://www.dartmouth.edu/~biomed/webcam.html).



for all the prizes awarded to '08s.

Awards were also given out to three of the class's teachers. Dr. Joshua Mancini, a surgery resident, received the Thomas P. Almy Housestaff Teaching Award; Dr. Mara Rendi the Basic Science Teaching Award; and Dr. David Nierenberg the Clinical Science Teaching Award.

**Diplomas:** In all, 168 DMS students were handed diplomas this year: 62 M.D.'s; 25 Ph.D.'s (10 in microbiology and immunology, six in biochemistry, five in genetics, two in pharmacology and toxicology, one in physiology, and one in health policy and clinical practice); 55 M.P.H.'s; and 26 M.S.'s (one in biochemistry, one in microbiology, two in pharmacology and toxicology, and 22 in health policy and clinical practice).

At the College's graduation ceremony the next day, the honorary-degree recipients included two eminent scholars in science and medicine: Thomas Cech, a Nobel Laureate in chemistry, and Evelyn Fox Keller, a historian of science.

**Oath:** Class Day closed with a recitation of the Hippocratic Oath, in Greek by noted Dartmouth College language professor John Rassias and in English by the graduates and faculty.

The 2008 graduates then recessed, perhaps pondering one last question posed by Saunders: "How will you repay your obligation to a world that has granted you so much? You may enlist the help of anyone you wish; you are allotted exactly one lifetime to compose your answer."

AMOS ESTY

## Class of 2008 Prizes and Awards



**Dean's Medal** João Teixeira

**Good Physician Award** Courtney McIllduff

**John W. Strohbehn Medal for Excellence in Biomedical Research**  
Eric Arehart

**Frederic P. Lord Award in Anatomy** Jessica Hayward

**Department of Anesthesiology Award** Natacha Zamor

**Department of Medicine Paul Gerber Award** Christina Devine

**American Academy of Neurology Prize** Courtney McIllduff

**Barry D. Smith, M.D., Award for Excellence in Obstetrics and Gynecology**  
Ellen Garvey, Heidi Keup

**Saul Blatman Award for Excellence in Maternal and Child Health**  
Kandice Nielson

**Dr. Freddie Fu Orthopaedic Surgery Award** Garrett Davis

**E. Elizabeth French Award in Pathology**  
Elizabeth Fingar, Elliott Seeley

**New England Pediatric Society Award** Colby Wyatt

**Department of Psychiatry Award** Natalie Riblet

**Harte C. Crow Award in Radiology** Nicholas Telischak

**Arthur Naitove Surgical Scholar Award** Douglas Jones

**American Medical Women's Association  
Glasgow-Rubin Achievement Citation**

Joan Hier, Jennifer Lacy, Sharon Silveira, Ashlee Walls

**Julian and Melba Jarrett Memorial Prize** Caitlin Stashwick

**Merck Manual Awards**

Jennifer Frese, Heather Sateia, Ashlee Walls

**Payson-Hampers M.D.-M.B.A. Scholars Award** Garrett Davis

**John F. Radebaugh Community Service Award**  
Kathryn Bonafede, Kathleen Richard

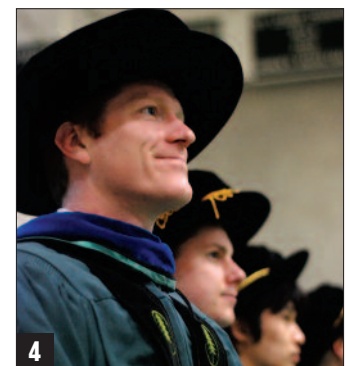
**John and Sophia Zaslow Prize** Kathleen Richard

**Douglas P. Zipes, M.D., Research Prize** Preethi Ramaswamy

**C. Everett Koop, M.D., Courage Award** Robert Lampman

**Rolf C. Syvertsen Fellow and Scholars**

Elizabeth Fingar, Brian Jones, Heidi Keup, Ashlee Walls



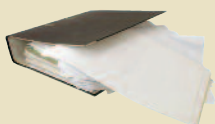
**CUT-AND-DRIED:** The American Pain Society chose just six multi-disciplinary pain centers as centers of excellence—including Dartmouth-Hitchcock's. It was the society's second annual awards program, and DHMC made the cut both years.



THEN & NOW

A reminder of the pace of change, and of timeless truths, from a 1968 DMS fund-raising brochure:

"Education for medicine in the United States faces a major dilemma, the most urgent and critical since its beginnings in the 18th century. It is today too long, too costly, and insufficiently related to the nation's present and future health needs. New patterns of education for medicine are required and Dartmouth has the unique opportunity and obligation to develop them."



53

Number of first-year M.D. students at DMS in 1968

\$2,200

Annual DMS tuition then

78

Number of first-year M.D. students at DMS in 2008

\$40,120

Annual DMS tuition now

**Opportunity knocks in pharm-tox for DeLeo**

July 1 was my 20th anniversary here," says Joyce DeLeo, Ph.D. A DMS pain researcher, she is the new chair of the Department of Pharmacology and Toxicology. But when she arrived at Dartmouth as a postdoctoral fellow in 1988, DeLeo "assumed I'd be here only a few years."

Instead, she joined the faculty in 1991 and has distinguished herself ever since as a researcher and a leader. She was a fellow in the Hedwig van Ameringen Executive Leadership in Academic Medicine Program in 2001-02 and acting department chair in 2002-03.

**Endowed:** She became the inaugural director of Dartmouth's Neuroscience Center in 2002. She helped establish an interdisciplinary Ph.D. program in experimental and molecular medicine. She received Dartmouth's first Graduate Faculty Mentoring Award in 2004. And in 2005 she was appointed to an endowed chair—DMS's

Irene Heinz Given Professorship of Pharmacology.

In her newest role, DeLeo succeeds longtime department chair Ethan Dmitrovsky, M.D., who recently received the American Cancer Society's top research award. It was a requirement of accepting it that he step down as chair. He'll be devoting his time to his research on lung cancer, as well as to mentoring young scientists and traveling for speaking engagements.

**Field:** Dmitrovsky calls DeLeo "an outstanding educator and person of science. She is an internationally recognized scholar in her field," he adds, "and a proven administrator."

One of the key challenges facing DeLeo will be helping the department find ways to counteract the decline in funding from the National Institutes of Health (NIH). One option may be to partner with biotech and drug companies. DeLeo holds

several patents, has served on scientific advisory boards, and was involved in the start-up of a pharmaceutical firm. "I thought with my background I could help the faculty think beyond the NIH paradigm," she says.

Her other goals include recruiting three new faculty members; better integrating the department, which is split between the Hanover and Lebanon campuses; and continuing to mentor faculty and students and support DMS's teaching mission. The department's breadth of research—especially in cancer, toxicology, and cardiovascular science—"is great for teaching, for recruiting students," and for research collaborations, she says.

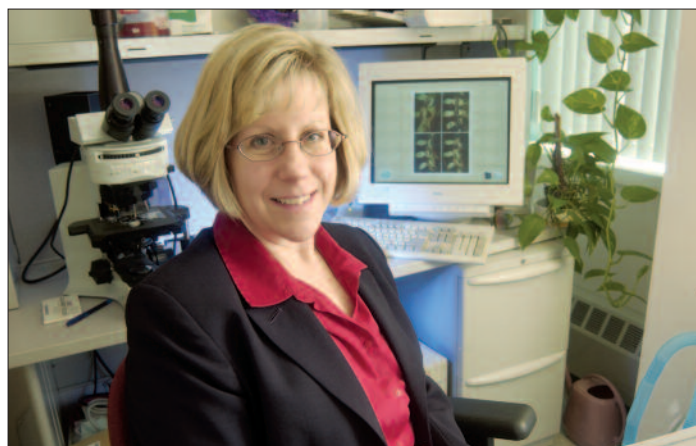
DeLeo will continue her own research on the neuroimmunology of chronic pain and translation of the results into ways to prevent and treat pain. She serves on numerous international review boards, NIH study sections, and editorial boards.

**Fulbright:** She earned a B.S. in biology and chemistry at the State University of New York at Albany in 1982 and a Ph.D. in pharmacology at the University of Oklahoma in 1988. She did predoctoral research as a Fulbright Scholar at the Max Planck Institute of Psychiatry in Martinsried, West Germany, and two postdoctoral fellowships—in neuroscience at Harvard and in anesthesiology at Dartmouth.

DeLeo won't have any problem keeping busy in the coming year, as she is also serving on the search committee for the new president of Dartmouth College.

Laura Stephenson Carter

MARK WASHBURN



DeLeo, the Irene Heinz Given Professor of Pharmacology, is now a department chair.



**TMI ABOUT DNA:** An op-ed essay in the *Washington Post* by DMS's Dr. Gilbert Welch and a coauthor said genetic screening provides too much information, more than is now clinically useful. "We need more research, not pricey genomic scans," they wrote.

## A chair, but not a beach chair, for Barlowe

Some people relaxed on the beach. Charles Barlowe, Ph.D., spent his summer taking on new responsibilities. On July 1, Barlowe became the chair of DMS's Department of Biochemistry, succeeding Ta Yuan Chang, Ph.D., who had led the program since 2000.

According to Barlowe, it has been a smooth transition. "The department is humming along," he says, and has a strong research portfolio. Yet he sees an opportunity for the department to develop new strengths by exploring the intersections where biochemistry meets related fields, such as computer science, engineering, and medicine.

Prior to assuming the chair, Barlowe served as Dartmouth College's dean of graduate studies, a position that meshed with his interest in interdisciplinary work. "That was a wonderful opportunity for me to learn a lot about this institution and a lot about different departments and disciplines," he says.

**Feel:** Barlowe realized as an undergraduate at the College of William and Mary that he was curious about scientific questions. After earning a bachelor's degree in chemistry, he went on to the University of Texas at Austin for his Ph.D. He says he chose that school because of the research opportunities it offered and because the "hustle and bustle" of the large campus would be a change from the small-college feel of William and Mary.

It was at Texas that Barlowe narrowed his focus to biochem-

istry and cell biology. After finishing there, he took a postdoctoral position at the University of California at Berkeley, where he received a Damon Runyon-Walter Winchell Cancer Fund Fellowship.

In 1994, Barlowe arrived at DMS. Dartmouth, he says, combined the best of the two types of institutions he had attended. "I liked the community at a small liberal arts college and I liked the community at major research universities," he says, "and I thought Dartmouth had both of those qualities."

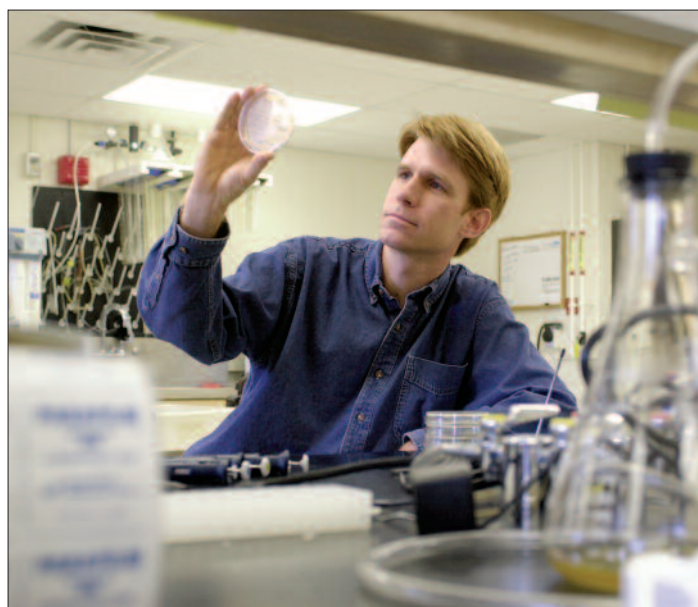
**Transit:** Two years later, Barlowe was named a Pew Scholar, and in 2007 he received a prestigious National Institutes of Health MERIT Award for his research on the intracellular trans-

**Barlowe enjoys "the excitement of identifying and solving problems."**

sit of proteins. He was promoted to full professor in 2004 but still teaches a class on biochemistry and metabolism for first-year medical students. "It is an intellectually challenging course," he says. "I'm glad I have been able to continue teaching."

**Post:** One aspect of science that's always fascinated Barlowe is "the excitement of identifying and solving problems." It's an interest that will probably prove useful in his new post. He says the challenges ahead include finding funding to bring in new faculty and to support their development, but he looks forward to taking them on. His role, he adds, will be "a mixture of continuing things that we do well and constantly asking ourselves what we can do to make the department better."

AMOS ESTY

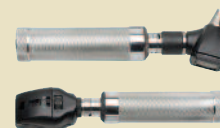


On the DMS faculty since 1994, Barlowe was just named chair of biochemistry.

## THEN & NOW

A reminder of the pace of change, and of timeless truths, from a 2001 book titled *The Education of Laura Bridgman: First Deaf and Blind Person to Learn Language:*

It was a Boston physician, Dr. Samuel Gridley Howe, who taught Laura Bridgman to communicate after she was left deaf and blind by a bout with scarlet fever. In 1837, Howe's "chance to test his speculations about the deaf and blind came . . . when he read a newspaper account of Laura Bridgman, a deaf, mute, and blind seven-year-old living in her parents' farmhouse in Hanover, N.H. This brief report was written by Dr. Reuben Mussey, a Dartmouth professor of anatomy and surgery."



0

Number of vision and hearing specialists on the DMS faculty in 1837

25

Number today

PHOTO: SQUIRREL GRAPHICS

**APPLES FOR THE TEACHERS:** Two of the 12 recipients of 2008 teaching awards at Harvard Medical School were DMS alumni—Drs. Hope Ricciotti '90 and Steven Schlozman '94—and one of the awards is named for Dr. Cynthia Kettyle, a DMS '69.



## I'LL TAKE EYE EXAM FOR \$500

“What’s ‘escin?’” asks a pediatric resident of a panel of staff pediatricians. This isn’t a trainee who’s forgotten a bit of medical knowledge, but a round of “Bluff the Pediatrician” in DHMC’s annual Pediatrics Quiz Bowl.

During this portion of the fierce but good-natured competition, the staff team will try to stump the residents by giving one real response and two fake but convincing ones. “A critical protease missing,” fires back one of the pediatricians. “A CIS [Clinical Information Systems] shortcut,” says another. “A hemolytic substance derived from a horse chestnut,” comes a third definition. Now the residents have to guess which one is correct.

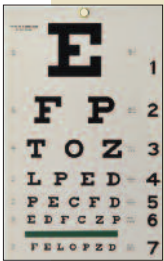
The Quiz Bowl also includes several rounds of “Rapid Response,” in which each team has two minutes to answer 10 questions. The categories are Saturday morning cartoons and the eye—or “You expect

me to do a fundoscopic exam on a screaming two-year-old?” Next is a round of “Name that Ye Olde Infectious Disease.”

So what is escin? After several moments of whispering, one of the residents guesses: “Number three?”

“Correct!” replies the staff team.

Now it’s the residents’ turn to try to fool the staff with fake answers. “What’s Holtzknecht?” comes their question. L.S.C.



## ELECTIVE WAS SEW ENJOYABLE

Mix seven medical students interested in quilting (and in neonatal medicine) with a handful of experienced quilters, then bake for several weeks. That’s the recipe behind an unusual elective that two then-second-year students, Amity Burr and Sarah Dotters-Katz, organized last spring. Burr and Dotters-Katz are members of the Sunshine Quilters Guild in Grantham, N.H., which donated most of the supplies for the elective.

Experienced members of the guild “came to all of our classes,” says Dotters-Katz, which “was a nice opportunity to learn tricks and skills from truly great quilters.” The students turned out six pint-sized quilts (one is pictured above) and gave them to babies in DHMC’s intensive care nursery. The elective also included a tour of the unit and guest talks by parents and grandparents of babies in the nursery.

“During medical school, we study all the time,” says Dotters-Katz. “It is nice to have other skills to escape to.” J.D.



## National pharm recommendations had DMS roots

A few years ago, in the middle of a lecture, DMS’s Dr. David Nierenberg felt a sharp pain in his side. “I literally jumped at the podium,” he recalls. Realizing almost immediately that he had a kidney stone, Nierenberg ended the class and drove himself to the DHMC emergency room. “The diagnosis wasn’t hard,” he says. “I walked in with the diagnosis.” The tricky part was how to treat the problem. Which drugs would ease his pain and help him pass the stone without conflicting with allergies or other medications?

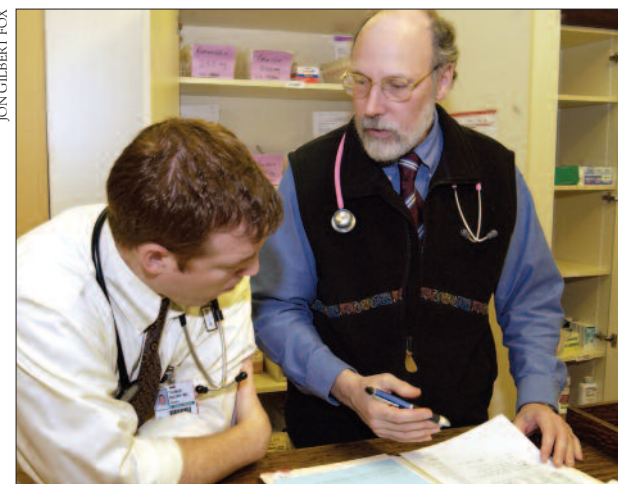
Two: The two doctors who arrived to discuss his treatment options looked familiar to Nierenberg, the senior associate dean for medical education. Both, it turned out, were DMS grads who’d taken his required fourth-year pharmacology course. “I hope they know what they’re doing,” Nierenberg recalls thinking. The incident had a happy ending medically, and it also reinforced Nierenberg’s belief in the importance of teaching medical students how to be competent prescribers.

“We are graduating medical students who will turn into the doctors who will be treating us and our families,” he says. “If we don’t train them well, they will not take care of us well.”

**Strong:** Nierenberg has been encouraging the nation’s medical schools to update their pharmacological curricula since he arrived at Dartmouth in 1981. The training at DMS is quite strong, he says, but many other schools still lag behind. So he was thrilled to be asked to chair a panel convened last year by the Association of American Medical Colleges (AAMC) to examine the problem. In July, the group issued its report, “Education in Safe and Effective Prescribing Practices,” the 10th in a series of reports on medical training published by the AAMC.

The panel discussed what

**“I hope they know what they’re doing,” Nierenberg recalls thinking.**



DMS’s David Nierenberg, right, delivering some one-on-one teaching, headed a national panel that made recommendations about teaching pharmacology in U.S. medical schools.

**COGITO ERGONOMICS SUM:** Aiming to boost its hand-hygiene rate to 100%, DHMC has been putting alcohol gel and glove dispensers in more easy-to-reach locations and is now closing in on 90%. National studies have found rates as low as 50%.



developed by Mark Lovell, Ph.D., director of the University of Pittsburgh's Sports Medicine Concussion Program. For the past 10 years, ImPACT has been the most widely used concussion management software in the National Football and National Hockey Leagues.

**Test:** The computerized ImPACT test can be administered by a nonclinician with minimal training. It takes about 25 minutes and consists of memory tests, such as word recall exercises, and spatial orientation tests based on geometric shapes.

If Pearson was the first person to see the test's potential to help battered women, it was Lt. Col. Patrick Tangney, M.D., state surgeon of the Maine Army National Guard, who—on learning of Pearson's work—saw its potential to help veterans.

"The percentage of American troops who are surviving battle wounds has risen dramatically," says Tangney, as a result of ad-

vances in both battlefield armor and treatment capabilities. And mTBI is an increasing concern for U.S. troops, since the weapons they most often face in Iraq and Afghanistan are improvised explosive devices and rocket-propelled grenades—both of which are highly likely to cause concussive brain injuries.

What Tangney realized is that if a baseline brain-function test could be performed for all soldiers, diagnosing mTBI would then be much easier.

"The best standard for normal performance in a given individual would be his or her test results before injury," he explains. But "whereas one cannot predict what particular athlete is going to sustain a concussion or what woman is likely to be battered, one certainly knows when a given National Guard unit is going to be sent into harm's way." So the plan is to give the ImPACT test to soldiers before a unit is deployed and then test them again after their return.

DMS has signed on to assist with the initiative, and Pearson, who has experience working in the Maine mental health system, is serving as its director. She's helping the Maine Guard launch the screening program and advising mental-health providers in the state on how to identify and care for mTBI patients.

**Rate:** "This project will help maximize available resources," she says, "so that all of our service members have the highest rate of recovery."

ROGER P. SMITH, PH.D.

## PAGING DOCTOR DO-SI-DO

By day, Dr. Maia Rutman (pictured below) is the medical director of emergency services for the Children's Hospital at Dartmouth. By night, she's a fiddler in the contra dance band Heathen Creek. She and fellow musicians Mark Koyama (mandolin) and Pete Johannsen (guitar) have been "filling the night with music and generally knocking the socks off all and sundry" for seven years, according to the band's website.

Heathen Creek debuted around the time Rutman began her residency in Boston and has played throughout the northeast ever since. In April 2008, the band was invited to perform its fusion of Irish, French-Canadian, and old-time tunes—overlaid on modern rhythms—at the New England Folk Festival in Mansfield, Mass.

Rutman doesn't keep her medical and her musical lives totally separate: Heathen Creek's 2004 CD, *24 Hours*, includes a waltz called "Sea Fog," which she says she wrote after an especially exhausting overnight shift in the hospital. V.H.



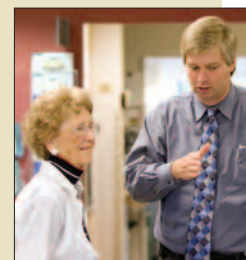
## WHITE-GLOVE TREATMENT

In 1937, when Justine Caldwell enrolled in the first class at the Mary Hitchcock School of Medical Technology, students didn't wear protective gloves and formulated a lot of their own reagents. The school, now called the MHMH Medical Technology Program, is thriving 71 years later—but a lot has changed besides its name.

Today's students take an intense six-month course in the pathology lab. They operate blood gas analyzers to assess oxygen and carbon dioxide levels in preemies. They learn about platelet counts. They do blood tests for patients on anticoagulant therapy and patients with hemophilia.

The program has been affiliated with the University of New Hampshire since 1954. Students complete three and a half years of coursework there, then do their clinical training at DHMC, emerging with a B.S. in medical laboratory science.

Caldwell—a spry 90-year-old—attended this year's graduation and after the ceremony got a tour of the facility (pictured above). Gloves were optional on the tour but are now required attire for anyone who works in the clinical labs. M.C.W.



CRAIG DEROUJRON

**A partnership between DMS and the Maine National Guard may someday help soldiers like this one in Ramadi.**

**TAKE NOTE:** "It's a Grand Night for Singing"—from Rodgers and Hammerstein's *State Fair*—would be a good theme song for Dr. Da-Shih Hu. The DMS psychiatrist appears regularly in local musical productions and this summer performed in *State Fair*.



**RISK CHART FOR WOMEN**

Find the line closest to your age and smoking status<sup>†</sup>. The numbers tell you how many of 1,000 women will die in the next 10 years from....

Age	Smoking	Vascular Disease		Cancer					Infection			Lung Disease	Accidents	All Causes Combined*	
		Heart Disease	Stroke	Lung Cancer	Breast Cancer	Colon Cancer	Ovarian Cancer	Cervical Cancer	Pneumonia	Flu	AIDS	COPD			
35	Never smoker	1			1							1		2	14
	Smoker	1	1	1	1							1		2	14
40	Never smoker	1			2	1	Fewer than 1 death					1		2	19
	Smoker	4	2	4	2							1	1	2	27
45	Never smoker	2	1	1	3	1	1					1		2	25
	Smoker	9	3	7	3	1	1			1		1	2	2	45
50	Never smoker	4	1	1	4	1	1							2	37
	Smoker	13	5	14	4	1	1			1			4	2	69
55	Never smoker	8	2	2	6	2	2	1		1			1	2	55
	Smoker	20	6	26	5	2	2	1		1			9	2	110
60	Never smoker	14	4	3	7	3	3	1		1			2	2	84
	Smoker	31	8	41	6	3	3	1		2			18	2	167
65	Never smoker	25	7	5	8	5	4	1		2			3	3	131
	Smoker	45	15	55	7	5	3	1		4			31	3	241
70	Never smoker	46	14	7	9	7	4	1		4			5	4	207
	Smoker	66	25	61	8	6	4	1		7			44	4	335
75	Never smoker	86	30	7	10	10	5	1		8			6	7	335
	Smoker	99	34	58	10	9	4			14			61	7	463

<sup>†</sup> A never smoker has smoked less than 100 cigarettes in her life and a current smoker has smoked at least 100 cigarettes or more in her life and smokes (any amount) now.  
\* The numbers in each row do not add up the chance of dying from everything combined, because there are many other causes of death besides the ones listed here.

## Charts developed at DMS offer a clear comparison of risks

What's the biggest killer of men and women under age 40 who have never smoked? Not heart disease, not cancer, but accidents—unintentional injuries. That may come as a surprise, say three Dartmouth physician-researchers, because health risks are rarely put in context.

**Risks:** "Useful messages about health risks should address two questions," the team wrote recently in the *Journal of the National Cancer Institute*: "How big is my risk and how does this risk compare with other risks?"

Using national data, Drs. Steven Woloshin, Lisa Schwartz, and H. Gilbert Welch created charts that attempt to answer those questions for the most common causes of death, plus a few of the most-talked-about causes. They wanted to help people "make sense of the health threats they face."

**Mortality:** The charts also "provide a compelling demonstration of the harms of cigarette smoking," Woloshin and his colleagues wrote. "The effect of smoking on mortality risk is like adding 5 to 10 years of age," they pointed out.

The *New York Times* was impressed by the charts, noting that they "provide a broader perspective than most of the risk calculators available on the internet." Both physicians and patients may find them a handy tool to assess individual risk.

**RISK CHART FOR MEN**

Find the line closest to your age and smoking status<sup>†</sup>. The numbers tell you how many of 1,000 men will die in the next 10 years from....

Age	Smoking	Vascular Disease		Cancer			Infection			Lung Disease	Accidents	All Causes Combined*	
		Heart Disease	Stroke	Lung	Colon	Prostate	Pneumonia	Flu	AIDS	COPD			
35	Never smoker	1	1							2		5	15
	Smoker	7	1	1	Fewer than 1 death					2		5	42
40	Never smoker	3	1	1	1					2		6	24
	Smoker	14	2	4	1					2	1	6	62
45	Never smoker	6	1	1	1					2		6	35
	Smoker	21	3	8	1				1	2	2	6	91
50	Never smoker	11	1	1	2	1		1		1		5	49
	Smoker	29	5	18	2	1		1		3	3	5	128
55	Never smoker	19	3	1	3	2		1		1	1	5	74
	Smoker	41	7	34	3	1		1		7	1	4	178
60	Never smoker	32	5	2	5	3		2		1	1	5	115
	Smoker	56	11	59	5	3		3		1	16	4	256
65	Never smoker	52	9	4	8	6		3			3	6	176
	Smoker	74	16	89	7	6		5			26	5	365
70	Never smoker	87	18	6	10	12		6			5	7	291
	Smoker	100	26	113	9	10		9			45	6	511
75	Never smoker	137	32	8	13	19		12			6	11	449
	Smoker	140	39	109	11	15		16			60	9	667

<sup>†</sup> A never smoker has smoked less than 100 cigarettes in his life and a current smoker has smoked at least 100 cigarettes or more in his life and smokes (any amount) now.  
\* The numbers in each row do not add up the chance of dying from everything combined, because there are many other causes of death besides the ones listed here.

More information about these risk charts, as well as charts for former smokers, is at <http://www.vaoutcomes.org/riskcharts.php>.

JENNIFER DURGIN



**PEDAL PUSHERS:** Nearly 4,200 bike riders and walkers from all across the United States took part in the 2008 Prouty, which benefits Dartmouth's Norris Cotton Cancer Center—this year raising more than \$2 million for cancer research and care.

## THEN & NOW

A reminder of the pace of change, and of timeless truths, from the Fall 1991 issue of this magazine:

“Dr. Lyman Spalding, a pupil of and early assistant to [DMS founder] Nathan Smith, was the author of the first American pharmacopoeia. The book was published in 1820 and contained a list of 217 drugs. . . . Spalding's *Pharmacopoeia* established uniformity of nomenclature and standards of purity for all medicinal substances then known [and] was a standard reference well into the 20th century.”



### 2008

Year DMS's Dr. David Nierenberg chaired a national panel on how best to teach pharmacology to U.S. medical students

### 3,000+

Number of drugs listed in the 2008 edition of the *Physicians' Desk Reference*

## Shining a light on OSHA record-keeping practices

Dr. Robert McLellan didn't expect to be taking on the Occupational Safety and Health Administration (OSHA) when he was elected president of the American College of Occupational and Environmental Medicine last year. But when dozens of physicians complained to McLellan, who is the chief of occupational and environmental medicine at DHMC, that they were being pressured to underreport workplace injuries, he decided to take action.

His term as president ended in May, but he's continuing to address the issue and testified before Congress in June.

**Log:** Employers are required to report work-related injuries and illnesses on an OSHA log. The data is compiled into national surveys to help the government assess workplace safety, allocate occupational health and safety resources, and develop interventions for high-risk industries. But if the log is inaccurate or incomplete, then the picture of work-related injuries and illnesses is distorted.

Most employers try to do the right thing, McLellan says. But some insist that doctors treat injuries in ways that don't have to be reported on the OSHA log—like applying a bandage to a cut instead of stitching it up, using a Q-tip instead of the appropriate tool to remove a foreign object from an eye, or even treating a fracture as a sprain. He guesses only 10% of employers try to ma-

nipulate the system. But others may make reporting errors because they don't have the resources to deal with OSHA's complicated rules.

Also, some employers provide incentives—such as offering bonuses to employees for maintaining an injury-free workplace or awarding contracts to companies with low injury rates—that may discourage reporting of workplace injuries.

But underreporting is only part of the problem, McLellan continues. The OSHA log excludes from workplace safety statistics nearly a third of the American workforce—so-called contingent workers, or self-employed contractors. OSHA statistics suggest that the nation's safety record has been improving. But recent studies, done with databases that capture a broader array of work-related injuries and illnesses than OSHA does, have shown that the federal logs are incomplete and include less than half of actual injuries.

“The OSHA log was never designed to serve as a single, comprehensive metric of occupational health and safety at either the national or employ-

er level,” said McLellan in his testimony before the House Education and Labor Committee. It “has grown to serve many purposes beyond that for which it was designed.”

**Audit:** He reminded Congress that physicians have an ethical obligation to provide the best care for patients. And he recommended that OSHA update its record-keeping standards and enforcement efforts, increase the number of medical records it includes in its audit, and broaden its list of occupational-health indicators. The goal, he said, is to improve the quality of the data used to prevent work-related injuries and illnesses.

“No single party is to blame for underreporting,” McLellan told the committee. “It is not our intention to point fingers, but... to seek solutions that are based on doing what's right for the patient and that are grounded in good science and best practices.”

Laura Stephenson Carter



McLellan, right, just ended his term as president of a national society but is still speaking out on workplace health.

MARK WASHBURN



**THE WRITE STUFF:** A feature by Paula Hartman Cohen in our Spring 2007 issue, "The Other Side of the Stethoscope," won a 2008 Will Solimene Award from the New England chapter of the American Medical Writers Association.

Dartmouth Institute for Health Policy and Clinical Practice.

**Leg:** The Dartmouth study was conducted in 14 communities that have been part of RWJF's Aligning Forces for Quality program since 2006. The researchers examined five different measures of care: leg amputation rates; breast cancer screening rates; diabetes blood-test rates; preventable hospital stays; and the percentage of patients with a primary-care provider.

The most striking finding was that the rate of leg amputations—a complication of diabetes and vascular disease—not only varies among regions but is four times greater in blacks than in whites. There were significant differences in the other four measures, too, including a three-fold variation in hospitalizations that could have been avoided with better outpatient management of such conditions as diabetes or heart failure.

**Chronic:** The 14 communities were chosen in 2006 for the first phase of the RWJF initiative, which focused on improving the

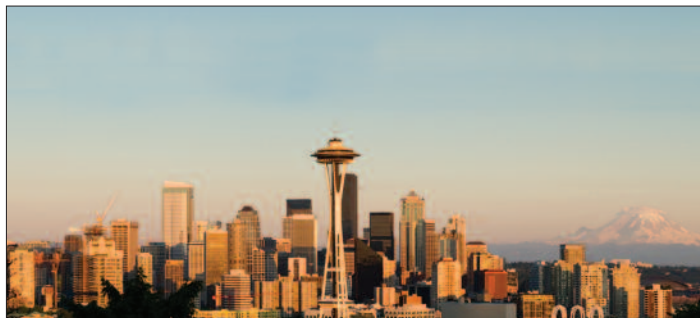
quality of care in outpatient settings for patients with chronic conditions. With the new \$300-million investment in June, the effort was expanded to include inpatient care, to reduce racial and ethnic disparities in care, and to enhance the role of nurses. Both phases have involved patients, providers, and payers. The premise of the program is that no single person, profession, or group can improve care without the support of others.

**Cities:** The 14 communities represent 11% of the U.S. population and were chosen to reflect the breadth of the nation. Included are several cities, such as Seattle, Wash., and Memphis, Tenn.; a few regions, like western Michigan; and a few whole states, including Maine. The communities have already begun to show improvements.

The initiative represents a new type of partnership, noted Lavizzo-Mourey. "Improving the quality of care can only take place where patients and best practices converge," she said.

LAURA STEPHENSON CARTER

**There were significant differences in the other four measures, too.**



Seattle, Wash., was one of 14 communities across the U.S. that the Robert Wood Johnson Foundation commissioned Dartmouth to study, as part of an initiative that's addressing racial, ethnic, and geographic disparities in the delivery of health care.

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

**Constance Brinckerhoff**, Ph.D., the Nathan Smith Professor of Medicine, has been named a master



by the American College of Rheumatology. One of the organization's highest honors, mastership recognizes outstanding contributions to the field of rheumatology through scholarly achievement and service to students and the profession. See page 52 for more on Brinckerhoff's career.

**John Wennberg**, M.D., M.P.H. (below), the Peggy Y. Thomson



Professor of the Evaluative Clinical Sciences and director emeritus of the Dartmouth Institute for Health Policy and Clinical Practice, and

**Elliott Fisher**, M.D., M.P.H. (below), a professor of medicine and the



director of the Center for Health Policy Research, were named to a new Working Group on Medicare Reform convened by the Century Foundation, a nonpartisan public policy research organization. The group, made up of prominent health-policy experts from

around the country, will assess the state of Medicare and make recommendations to reform and strengthen the program. Dartmouth is the only institution represented more than once on the 11-member group.

**William Hickey**, M.D., a professor of pathology, was elected a governor of the College of American Pathologists.

**Paula Schnurr**, Ph.D., a research professor of psychiatry, received a



*Ladies' Home Journal* Health Breakthrough Award, in recognition of her research on post-traumatic stress disorder in female military personnel.

A teaching tool called the Computer-assisted Learning in Pediatrics Program (CLIPP) was presented with the 2008 Academic



Pediatrics Association's Outstanding Teaching Award. CLIPP was created by **Leslie Fall**, M.D. (at left), and

**Norman Berman**, M.D. (below); both are associate professors of pediatrics. A web-based software program, CLIPP is



designed to be used by third-year medical students during their pediatric clerkships. It is now used by more than 80 of the 129 U.S. medical schools.

*continued on page 56*