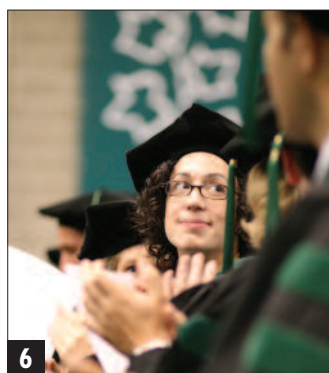




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6

ALL: RYAN SQUIRE GRAPHICS

THEN & NOW

A reminder of the pace of change, and of timeless truths, from remarks by the late Dartmouth President James O. Freedman at DMS's 1997 bicentennial symposium:

"For its first 10 years, Nathan Smith was Dartmouth Medical School's only faculty member. . . . Yet even under such austere conditions, Smith impressed the proper authorities. After attending one of Smith's lectures, Dartmouth's second president, John Wheelock, is said to have offered this prayer in the College chapel: 'O Lord, we thank Thee for the Oxygen Gas; we thank Thee for the Hydrogen Gas; and for all the gases. We thank Thee for the Cerebrum; we thank Thee for the Cerebellum; and for the Medulla Oblongata. Amen.'"



2,188

Number of DMS faculty members in 2008



7



8



9



10



11

As the crowds gathered for DMS's 2008 Class Day festivities, **1** bagpipers James Feeney '00, left, and Katherine MacInnes '11 warmed up their chanters (they were joined in the procession by Travis Matheny '00, not pictured), while **2** internist Mark Splaine, left, straightened Nathaniel Jones's regalia (they were two of the faculty hooders). Then it was into Leede Arena to hear a keynote address by **3** Stephen Atwood '70. The ceremony also included the presentation of awards, including to **4** pharmacology-toxicology grad Eric Arehart. **5** The 62 M.D. grads included **6** Rachel Kornik. Also reveling in the festivities were **7** M.D. grads, from the left, Laura Shively, Rebecca Rotello, and Ashlee Walls; **8** Dean Bill Green, center, and a couple of crimson-hooded colleagues; **9** microbiology-immunology grads Shelly Krebs, left, and Francisca Maira; **10** M.D. grads Vadim Ioselevich, left, and Christopher Jordan; and **11** health policy and clinical practice grads Dai Nguyen, left, and Olubadewa Fatunde.

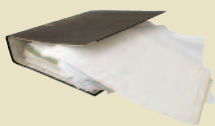
CUT-AND-DRIED: The American Pain Society chose just six multi-disciplinary pain centers as centers of excellence—including Dartmouth-Hitchcock's. It was the society's second annual awards program, and DHMC made the cut both years.



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.

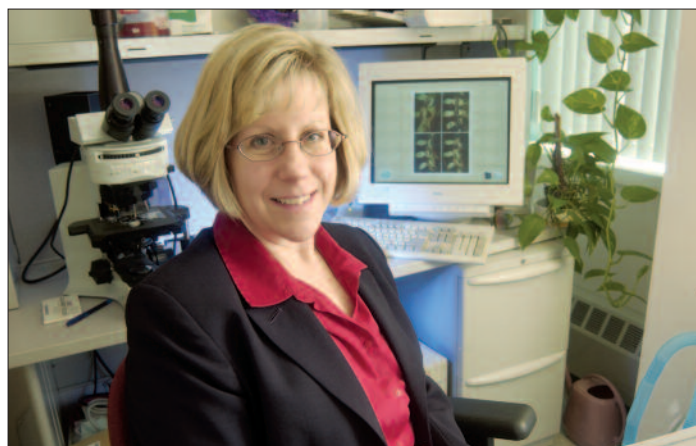
DeLeo will continue her own research on the neuroimmunology of chronic pain and translation of the results into ways to prevent and treat pain. She serves on numerous international review boards, NIH study sections, and editorial boards.

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

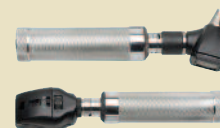


On the DMS faculty since 1994, Barlowe was just named chair of biochemistry.

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



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