Training physicians to help patients take ownership of their care

For much of her 35-year career, Dr. Martha Regan-Smith has investigated ways to improve physician education. Now, paradoxically, that interest has her focusing on patient education. She will soon complete a Helmut Schumann Fellowship—designed for mid-career professionals seeking new approaches to problems—and begin training doctors how to teach their patients better self-management of chronic disease.

Care: “Most illness and most cost in the [health-care] system is chronic disease,” says Regan-Smith, a rheumatologist and a professor of medicine at Dartmouth. Patients with diseases like arthritis and diabetes, which require careful monitoring of symptoms and adjustments in behavior, could assume more responsibility for their own care. And yet, Regan-Smith explains, many do not—either because they don’t know how or because their doctors don’t know how to encourage self-management.

Believing strongly that care should be designed both for and with patients, Regan-Smith applied for the two-year Schumann Fellowship with the goals of learning more about patient self-management and finding or creating a curriculum to train doctors in using this technique.

Her quest took her from nearby Springfield, Mass., where she learned the basics of self-management; to Stanford, where she took a course with Dr. Kate Lorig, a pioneer in self-management for patients with arthritis; and ultimately to Flinders University in Adelaide, Australia, where all the pieces of the puzzle came together as she learned how physicians can promote self-management using a method called the Flinders Model.

Developed by Dr. Malcolm Battersby, the Flinders Model is based on a structured way of interviewing patients. First, patients take a short self-assessment test to determine their current level of self-management skills. Next, a doctor or another health professional asks a series of questions to get at patients’ understanding of their diseases and medications, as well as their involvement in monitoring symptoms and adjusting behaviors. Finally, patients are asked about the impact of the disease on their daily life. During the interview, Regan-Smith explains, the doctor’s role is to listen and let the patient talk.

Goal: Then the doctor will ask, “What is your biggest problem in life and how do you feel about it?” Often the disease itself is the biggest problem and the patient’s goal is to reduce its symptoms, but not always. Regan-Smith says patients of hers have identified goals such as “I want to be able to renovate the bathroom in our house” or “I want to be able to put my children to bed at night.” When they are working toward a realistic goal chosen by the patient, it is easier for the patient and the doctor to come up with a care plan together—and for the patient to stick with it.
One of Regan-Smith’s patients, James Cote of Etna, N.H., was diagnosed with rheumatoid arthritis about 10 years ago. Now 56, Cote had to retire from his job with the phone company earlier than he’d have liked and to curtail activities he enjoyed, such as gardening and hunting.

Flare-up: “The thing about rheumatoid arthritis,” Cote says, “is that you feel like you can still do things. But if I went out and hunted all day, I wouldn’t be able to move the next day.” Not surprisingly, the disease made him hyper-aware of pain and near-immobility. “Normally” and then paid for it.

“Flare-up: “The thing about rheumatoid arthritis,” Cote says, “is that you feel like you can still do things. But if I went out and hunted all day, I wouldn’t be able to move the next day.” Not surprisingly, the disease made him hyper-aware of pain and near-immobility. “Normally” and then paid for it.

A little over a year ago, Regan-Smith observed medical students being trained to use the Flinders Model; she hopes that American students will soon have the same opportunity. In fact, she says, she hopes that training in patient self-management will be mainstreamed into American medicine within the next five years.

Regan-Smith will be doing her part to bring that about. She was recently invited to present two workshops with Malcolm Battersby at the International Conference on Patient Self-Management, in British Columbia. “This is a big honor for me,” she says, “with less than two years’ work in self-management.”

**Students address big needs behind bars**

Prison health care is a really, really big public-health problem,” says Olga Lemberg, a second-year student at DMS. Lemberg and her classmate Maricruz Merino—two of several Albert Schweitzer Fellows at DMS this year—are doing their part to address the problem. They are organizing health-awareness workshops at the New Hampshire State Prison for Women, in Goffstown, N.H., where such services are desperately needed.

Anger: A December 2004 report from the New Hampshire Commission on the Status of Women (NHCSW) makes it clear just how big the need is. “Outside of chaplaincy services, the New Hampshire State Prison for Women has no state-funded life skill programs,” the report notes. In contrast, the New Hampshire State Prison for Men has 11 state-funded programs in areas such as anger management, domestic violence, and parenting, as well as Alcoholics Anonymous and Narcotics Anonymous meetings. At the women’s facility, similar programs are run only by volunteers, like Lemberg and Merino.

“For us, the main goal is that we are providing these women with skills, practical skills, life skills, to productively live out their time in the prison and then, when they get out, in their lives outside of the prison,” says Lemberg. Working with the prison’s mental-health director, Lemberg and Merino decided to focus on seven topics: nutrition, substance abuse, oral health, HIV and AIDS, other infectious diseases (especially tuberculosis and hepatitis C), mindfulness and meditation, and patient-doctor communication.

So far, the prison workshops have been well received by the inmates who have attended them. “They were more receptive to us than I thought they would be,” says Merino. “I really felt like they might write us off as two medical students who know nothing about what they’ve been through. Just going there made me realize that these women, for the most part—the ones that we’ve met—they want to better themselves.”

Lemberg and Merino are not teaching the sessions themselves but have recruited specialists from DHMC and DMS. Clinical dietician Jil Shangraw led the session on nutrition. “It was 100% better than I thought it would be,” says Merino. “I really felt like they might write us off as two medical students who know nothing about what they’ve been through. Just going there made me realize that these women, for the most part—the ones that we’ve met—they want to better themselves.”

Lemberg and Merino are not teaching the sessions themselves but have recruited specialists from DHMC and DMS. Clinical dietician Jil Shangraw led the session on nutrition. “It was 100% better than I thought it would be,” says Merino. “I really felt like they might write us off as two medical students who know nothing about what they’ve been through. Just going there made me realize that these women, for the most part—the ones that we’ve met—they want to better themselves.”

Lemberg and Merino are not teaching the sessions themselves but have recruited specialists from DHMC and DMS. Clinical dietician Jil Shangraw led the session on nutrition. “It was 100% better than I thought it would be,” says Merino. “I really felt like they might write us off as two medical students who know nothing about what they’ve been through. Just going there made me realize that these women, for the most part—the ones that we’ve met—they want to better themselves.”

Lemberg and Merino are not teaching the sessions themselves but have recruited specialists from DHMC and DMS. Clinical dietician Jil Shangraw led the session on nutrition. “It was 100% better than I thought it would be,” says Merino. “I really felt like they might write us off as two medical students who know nothing about what they’ve been through. Just going there made me realize that these women, for the most part—the ones that we’ve met—they want to better themselves.”
Learning to confront physician substance abuse

We are incredibly selfish people. We make family and colleagues suffer,” said a doctor who coped with a longtime drug addiction while in practice. He was speaking to an auditorium filled with rapt DMS students as part of a class on physician substance abuse; it is one session in a fourth-year course for medical students called Health, Society, and the Physician. “It will happen at one time for all of you—that you will have to confront a colleague about this,” continued the doctor. That was the reason he and two other doctors were willing to share their stories.

Struggle: Talking to someone about their addictive disorder can be extremely hard, Dr. Seddon Savage told the students. Savage, the director of the Dartmouth Center on Addiction, Recovery, and Education, had put together the two-hour class. People still struggle, she said, with the idea that substance abuse is a disease. Other caregivers can be afraid to confront a colleague because they may think they’ll be perceived as pushing some kind of moral message. “I think that doctors are generally pretty strong and independent people, and it’s difficult for nonphysicians especially to bring up issues that suggest they’re less than full, whole, and strong,” explains Savage in a later interview.

Medical researchers, physicians, and the public are starting “to understand and believe that addiction is a chronic medical condition” and to treat it that way, says Savage. Likewise, medical schools are “just beginning to educate young, evolving physicians—medical students—in addiction medicine and in the chronic medical illness that is addiction. And until that infuses medical education, the perceptions of the general public and the operations of the healthcare system are not going to optimally address addiction in anyone, including physicians.”

A 1992 study in the Journal of the American Medical Association found that addicted physicians are most likely to practice anesthesiology, followed by emergency medicine, family practice, and general surgery, and that alcohol is the most common substance of choice, with opiates and benzodiazepines close behind.

Stress: For physicians, says Savage, substance use can look like an easy way to relieve the stress of their work—the responsibility for others’ health; the privilege and burden of knowing intimate details of others’ lives; the long hours; and the competing demands of work, family, and self-care. Some medical professionals hike, listen to music, or exercise to let off steam, while others, Savage says, “kick the dog” or turn to substances.

Addiction is tricky to treat, she explains, since addicted individuals often deny the hold the drug has over them. They crave it because their brain tells them they need it—a phenomenon called the “hijacked brain,” since the craving can disorder thinking. The manipulation and de-
Celebration serves as a foundation for $250-million campaign

Today we are faced with an enormous explosion of new knowledge,” Dr. Stephen Spielberg, DMS’s dean, told a crowd of people who gathered at DHMC at the end of November to celebrate medicine at Dartmouth. “The challenge then is how to integrate this new knowledge into our curriculum—the teaching of medical students—and into the care of patients.”

The “Celebrating Dartmouth Medicine” event featured a dinner for DMS and DHMC supporters, plus panel discussions and presentations the next day by prominent faculty members. Held just a few weeks after Dartmouth College’s announcement of a Collegewide campaign to raise $1.3 billion by 2009, the DMS event laid a foundation for the official launch of DMS and DHMC’s portion of the campaign, which has a goal of $250 million; that launch is scheduled for late May.

Session: A session titled “Are We Better Off Today than 200 Years Ago?” was a reprise of a panel offered at the College launch in New York City. Once again, Dartmouth alumna Susan Dentzer—health correspondent for the PBS NewsHour, as well a DHMC Trustee, a DMS Overseer, and a former College Trustee—moderated a provocative discussion between Dr. Mark Israel, director of Dartmouth’s Norris Cotton Cancer Center, and Dr. John Wennberg, direc-
HI, TECHNOLOGY: Incoming Dartmouth medical students are now, as of the current first-year class, required to have a personal laptop computer (a computer was recommended before this year but not required).
owe Dartmouth everything for my education."

Payson’s gift will be divided equally: half will provide scholarships for New Hampshire students to attend DMS and half will sponsor a select group of DMS students who wish to pursue an M.B.A. at Dartmouth’s Tuck School of Business, in addition to their medical degree. “It’s very expensive to go to medical school and to go to business school, and to do both is really a hardship,” he says.

By helping to train physicians in business, Payson hopes to bridge the “disconnect between what really happens in the marketplace, how health care is delivered, how it’s financed, and medical science.”

Marketplace: He explains further: “They’re different fields really. So physicians don’t necessarily understand, nor should they understand, the marketing of health insurance, or what goes on in the marketplace, or what are the economics of drug development, or how hospital economics work. It’s not their field to understand that. But Tuck students, on the other hand, are well groomed in business and they understand markets, finance, and business, but obviously they don’t have the healthcare background.”

Payson attributes his own success in building Healthsource—from its early days to its later acquisition by the large mass-market pharmacy benefit manager, based Oxford Health Plans from New York—to his knowledge of both medicine and business, as well as to his professors at DMS. “I got a truly healthy sense of skepticism... about how health care is delivered,” he says. He was introduced to the ideas “that our medical records are run amuck; that there’s no communication between physicians;... that one should be more skeptical about how health care is delivered; that we can do better—provide better care [that is] more affordable, more responsive to patients.” These are among the concepts that later became embodied in Dartmouth’s Center for the Evaluative Clinical Sciences (CECS).

Dartmouth now has the opportunity “to be a model for how health care can be delivered better. And the glue is CECS, because CECS is such a national leader in studying variation of practice patterns and outcomes,” says Payson, who has served on the DMS Board of Overseers since 2001. He also teaches health-care finance to Tuck and CECS students and is part of a workgroup—led by Dr. Paul Batalden at CECS—that is focused on reducing costs within the health-care system.

Formalize: Ultimately, Payson hopes that his gift will help to train some of the future leaders of the health-care marketplace. “Who’s going to be the CEOs of the big pharmaceutical companies?” he asks. “Who’s going to run the big biotech companies? Who’s going to help run the insurers of the world and all the rest? We should train some of those people, rather than people just randomly learning and doing it. That’s good, too,” he adds, “but it’s good to really formalize the educational pathway.”

Anne Villeneuve
$2 million grant will aid in the fight against AIDS in Africa

The DARDAR Health Project at DMS has been fighting AIDS in Tanzania—one patient, one scientist, and one student at a time. The project began in 2000 as an ambitious but single-focus study of tuberculosis (TB) in AIDS patients. Now it encompasses a health clinic in Dar es Salaam, an elective for DMS students, a fellowship underwritten by the National Institutes of Health’s Fogarty International Center, and studies related to HIV, TB, and hepatitis C. Next on the horizon is the establishment of a pediatric program in Dar es Salaam, thanks to a $2-million grant from the Foundation for the Treatment of Children with AIDS (FTCA).

“The new grant actually provides money for a number of different projects,” explains Dr. Fordham von Reyn, principal investigator for DARDAR. “The most important of these is a comprehensive HIV-care program for HIV-positive children of the mothers in our DARDAR study. We have done a survey of approximately 1,200 women in the study and have estimated that they have about 100 HIV-positive children, none of whom are in treatment.”

Antiviral: “Many of the women in the study have already lost children to AIDS,” continues von Reyn. “A major part of this grant will be to build a facility, hire . . . staff, provide the purchase of the expensive antiviral drugs for HIV, and then begin a treatment program.”

The grant will also fund a study aimed at keeping pregnant women with HIV and TB from transmitting TB to their babies. (There are already programs to prevent mother-to-child HIV transmission.) Von Reyn and his colleagues in Dar es Salaam have found that about 15% of people with HIV in Tanzania also have previously unrecognized active TB; they suspect that a similar percentage of HIV-positive pregnant women have undiagnosed TB. “There is very little known about how to diagnose that,” von Reyn explains, “the best way to treat it, and the best way to manage their newborns.”

Endowment: A new DMS faculty endowment—named in honor of John L. Steffens, a 1963 Dartmouth College alumnus and a major supporter of FTCA—is also being funded by the grant. The position will be filled by an infectious-disease specialist who will serve as director of the new pediatric program.

Investing in the future is an important component of DARDAR, which provides learning opportunities for students from DMS and Muhimbili University College of Health Sciences. This past fall, Cara Mathews, DMS ‘05, became the first student to do DARDAR’s six-week elective. The experience affected her deeply. “It is part of me, a part of every day, and a part of my future,” says Mathews.

She divided her time in Tanzania between seeing patients at the DARDAR clinic and participating in rounds at the Muhim-
bili University-affiliated hospital in Dar es Salaam. “I got to see the patients when they were ill, and that was a great experience for me because the diseases are so different than what we would see here,” recalls Mathews. While she was fascinated by the cases of malaria, which is uncommon in the U.S., the Tanzanian students were intrigued by the one patient who had had a heart attack—a condition Mathews had seen any number of times but the Tanzanians had not. “I had kind of thought, ‘Okay, we’ll treat him, and let’s move on.’ [But] we just stayed there and stayed there and talked about him.”

**Encounter:** Students who go to Dar es Salaam will “encounter both infectious diseases and other diseases... that they would never encounter in their careers here,” says Dr. Richard Waddell, a research assistant professor of medicine at DMS and one of the directors of DARDAR. “You also get to see how these diseases are dealt with in a resource-poor setting,” says Dr. Lisa Adams. Adams is a member of the DMS faculty and oversees the Fogarty Fellowship part of DARDAR. It allows graduate students and postdoctoral fellows from Muhimbili University to study at DMS and Boston University in one of several areas related to HIV and TB—vaccine research, mucosal immunology, behavioral change, and treatment research.

The name DARDAR is based on the first syllables of Dartmouth and Dar es Salaam; in addition, “dada” means “sister” in Kiswahili, one of the local languages. That way of describing the relationship between Dartmouth and Muhimbili University has become ever more apt in the years since the program’s founding. Not only strong working relationships but friendships, too, have arisen from the collaboration, according to Dr. Kisali Pallangyo, the principal of Muhimbili University College of Health Sciences.

**Infected:** Although HIV statistics in Tanzania remain daunting—as many as 3.3 million of the country’s 36 million residents are infected—DARDAR “holds great promise for growing and serving a community that has been severely affected by the AIDS epidemic,” according to Dr. Gary Noel, a 1977 Dartmouth College graduate and one of the founders of FTCA.

Pallangyo agrees. “The future of this collaboration is very promising,” he says.

Jennifer Durgin

---

**Incisionless surgery: Not a sci-fi movie anymore**

Imagine having surgery that didn’t entail a single cut through the skin—not even the small ones made as portals for laparoscopic procedures. Instead, a little robot would enter the mouth, zoom down the esophagus to the stomach, and exit through the stomach wall to other internal organs—like the appendix or gallbladder—and repair or even remove them.

Dr. Richard Rothstein, section chief of gastroenterology and hepatology at DHMC, is testing the world’s only robot that might be able to do just that. The robot’s flexible arms are attached to an endoscope—a tiny, flexible tube with a light and a camera lens—that’s been outfitted with surgical accessories. Rothstein demonstrates the system, sitting at a computer console where he views images being broadcast from inside his research model. He uses two joystick-like devices to control the robot’s movements and can adjust the robot’s “hands” to mimic the precise movements of human wrists, arms, and elbows.

“The idea would be to effortlessly recreate what you would try to do with your hands inside a very small space at the tip of the instruments,” Rothstein explains. He already uses endoscopy to perform diagnostic as well as therapeutic procedures, such as removing polyps and tumors in the stomach; treating gastroesophageal reflux disease; and removing precancerous cells from the intestinal tract.

The idea of incisionless surgery originated with endoscopy researchers in Japan, who began removing large stomach tumors through the mouth. In the process, they would sometimes puncture the stomach wall—without apparent ill effect.

“We don’t like... to perforate anything,” says Rothstein. But the Japanese experience “led to a whole new thought process about the future of surgery... in the sense that we no longer needed to make incisions on the surface of the body. We could make an incision inside the stomach, go out into the peritoneal cavity, and now you have access to the appendix, gallbladder, the fallopian tubes, the liver, even the uterus, ovaries, [and] other organs.”

As Rothstein worked on perfecting incisionless surgery techniques, he realized it might be possible to use surgical robots to assist in these complex procedures. About two and a half years ago, he began working with a Norwood, Mass., company that had developed a portable robot for laparoscopy—operations performed using a fiberoptic device inserted through a tiny incision in the abdomen. He thought the robot would work for endoscopy as well—operations using a fiberoptic device inserted through a natural opening in the body, such as the esophagus—especially incisionless procedures.

**System:** Robots aren’t new to medicine. For instance, the daVinci robotic surgical system is used at some medical centers to assist surgeons performing lap-
DHMC's Rich Rothstein demonstrates the robotic incisionless surgery system that he is working to perfect.

Robotic-controlled incisionless surgery would have several benefits. Patients would have no external scarring and so would tend to recover faster than from invasive surgery. In addition, robots can filter out fatigue-induced tremors in a doctor's hands and include safety features such as reading a patient's ID bracelet to be sure the correct patient undergoes surgery. And robots would allow a surgeon to operate in a remote location. Few people realize that a robot did a trans-Atlantic colonoscopy in September 2001; the surgeon was in New York City, and the patient was in France. But news of that advance was overshadowed by the tragic events of September 11.

**Stages:** Within the next five to ten years, “we're going to be able to do bigger operations through smaller incisions, or no incisions, if you do what Rothstein does,” predicts Dr. Joseph Rosen, a DMS plastic surgeon and futurist who helped the military develop one of the first surgical robots. Rosen envisions that, one day, people will be able to swallow multiple robots that would clump together, perform an operation, disengage, and then be excreted. That may be a way off, however. “All of this is new and exciting but still in its very early stages,” Rothstein says.

Mark P. Lawley

---

Promoting the intersection of healing and the arts

“I specialize in ‘sexy’ music,” accordianist Gary Sredzienski told a crowd of New Hampshire hospital administrators. To the elderly nursing-home residents for whom he often plays, Sredzienski explained, a jazz tune of the 1920s is every bit as “sexy” as a rock hit of the 1950s is to a baby boomer. He came to that realization, he said, when “a 90-year-old lady says to me, ‘Play that sexy music.’”

Sredzienski was the opening act of a symposium titled “Creating a Healing Environment: The Power of the Arts and Humanities.” It was sponsored by DHMC and held at Concord, N.H., Hospital. “Music as therapy can be terrific,” commented Naj Wikoff, director of the Healing and the Arts Project at Dartmouth's Koop Institute and an organizer of the symposium. Someone like Sredzienski explained Wikoff to the symposium attendees, is able to lift people's spirits and spark memories. “Getting them to sing a lot of the old songs . . . is exercising their brain,” he says.

Wikoff, who is also president of the national Society for the Arts in Healthcare (SAH), has helped foster the growing recognition of the healing effects of the arts. “A lot of the more personalized activities,” he says, such as storytelling, painting, and crafts, “take time. And doctors are in a time crunch. So the artist is able to spend time with the patient, and that makes the nurses feel better because they know a very important part of healing is taking place.” But it's not easy work. To train to work in a hospital, an artist must learn how to deal with disfigurement, how to uphold privacy, and how to share patients' reactions with a nurse or doctor.

**Positive:** At the symposium, Wikoff offered several examples of ways that art is used in hospitals worldwide to create a positive environment for patients and staff. A hospital in London, England, has huge stained glass windows in a public space, he said. “You go to the waiting room and you're flooded with light. [It's] a lot like going to church, that's how glorious that stained glass light feels. It just makes people feel like [they're] sitting inside of a rainbow.” And, he added, a children's hospital in Valhalla, N.Y., has a big tank in its lobby filled with tropical fish—a sort of living kaleidoscope.

Mark P. Lawley

---

Naj Wikoff poses with one of many pieces of art at DHMC—a granite sculpture titled Owls.
Wikoff has helped develop many such efforts at Dartmouth. The Healing and the Arts Project has set up a variety of arts electives and volunteer opportunities for medical students. In a 2003 survey of first- and second-year DMS students, 75% said they welcomed electives in the arts and humanities. A 2002 national survey reported that out of 100 medical schools, only 42 offered arts electives.

Impact: SAH’s impact has also soared under Wikoff’s leadership. Membership, consisting of both individuals and health-care organizations, doubled from 600 in 2003 to 1,200 in 2004. SAH also administers many grants, including to hospitals interested in establishing arts programs.

In a 2003 national survey administered by SAH and the Joint Commission on Accreditation of Healthcare Organizations, more than 2,500 hospitals reported having arts programs. Many such programs serve patients, and 41% of respondents to the survey reported also using the arts to serve hospital staff.

Caregivers “have a tendency of not wanting to be too close to their patients,” says Wikoff, “especially with patients who are at the end of life, because it’s emotionally hard. . . . The arts can help people through those transitions. They can help them deal with those fears, those emotions.”

“The arts can’t reduce the number of patients that a doctor or nurse has to see,” he acknowledges. “There are a lot of things it can’t do. It’s not about curing,” he says, “it’s about healing.”

Matthew C. Wiencke

The studies weren’t for real, but the “investigators” worked really hard

They had a lot to consider when designing their clinical trials: Ethical concerns. Alternative study designs. Confounding factors. Statistical integrity. Existing published research.

From the beginning, the Dartmouth undergraduates in Biology 81 knew that they would not actually be carrying out their studies. Nevertheless, their trials had to be built for the real world. And when it came time for their final poster presentations, they realized how much they had learned.

The course was designed by Dr. Kevin Curtis, a DMS emergency physician, to help undergraduates interested in medicine learn about clinical research. “Dartmouth College students will be our future leaders in many fields, including science and medicine,” according to Curtis. “The degree to which they will participate in future research will vary, but even for those who will only be reading journal articles on the research of others, an understanding of the underlying principles is essential.”

Though most of the students in the course were premeds, few had been exposed to the basic concepts of biomedical research. “Now I feel like I’m at least literate in the basic statistical terms,” said Katie Muse, a senior biomedical engineering major, as she stood in front of her poster. Muse, a member of Dartmouth’s junior varsity soccer team, focused her study on the effectiveness of passive-motion therapy in recovering from knee surgery—something many soccer players are familiar with.

Inherent difficulties: The students’ understanding expanded even more when they got a chance to spend some time in the DHMC Emergency Department, where they helped to enroll patients in real clinical trials. And their work on their own studies gave them a sense for the difficulties inherent in certain topics.

Laura Yasaitis—a senior majoring in biochemistry and minoring in Latin American studies—found her research question difficult to tackle. “It’s not like studying a specific intervention,” she said. Her study looked at the accuracy of the diagnoses that Spanish-speaking patients receive in emergency departments. “I was trying to address more systematic issues,” she said.

“The hardest thing” for senior philosophy major Trevor Jensen “was separating out the truth from the non-truth,” he explained. “A lot of the studies, just from what I know, were pretty sketchy.” His topic was the efficacy of certain edible mushrooms in reducing the fatigue often associated with breast-cancer treatments.

“This class gave me a real sort of hands-on understanding of how clinical research works,” said junior Justin Altschuler, a studio arts major. His trial, on the benefits of cinnamon for diabetics, may even make the leap from the hypothetical to the real world.

Actually: During the class’s poster presentation, Altschuler struck up a conversation with Dr. Todd MacKenzie, an assistant professor of medicine who studies the effects of green tea and other beverages on diabetes. MacKenzie agreed to help Altschuler find a way to actually conduct his study.

But, said Altschuler, “a lot needs to be done to get this from a poster to an actual study.”

Jennifer Durgin
DHMC is caring for staff as well as for patients

This spring, DHMC began “investing” in its employees’ health. By doing so, it hopes to benefit both its employees and its bottom line. The initiative, called the Health Care Worker Health Promotion (HCWHP) project, is partially funded by a grant from the U.S. Centers for Disease Control and Prevention. It provides free, voluntary health screenings for any DHMC physician or staff member on the Lebanon campus.

“A healthy workforce is a very good investment for employers,” says Dr. Robert McLellan, medical director of employee health and safety at DHMC. He believes that improving employee wellness can lower health-care costs, reduce the number of workers’ compensation claims, improve retention of current employees, and—by enhancing an institution’s reputation for treating its employees well—make the recruitment of new employees easier. Furthermore, in the field of health care, maintaining a healthy staff is important because healthy workers serve as good role models and are more likely to provide the best care possible for patients.

HCWHP has three parts. In part one, employees are offered an opportunity to participate in a 10- to 15-minute health screening that includes measuring their blood pressure and fasting blood-sugar and cholesterol levels. In part two, employees will complete, at their convenience, an online questionnaire (www.howsyourhealth.com). All participants will receive individually tailored health profiles that highlight their health strengths and weaknesses.

Parts: For most employees, the process will end at part two. But anyone with slightly elevated blood sugar—people who are at risk for developing adult-onset, or Type II, diabetes—will qualify for part three. This is a voluntary two-year study involving periodic screenings and surveys about lifestyle choices.

According to the American Diabetes Association, “Some long-term damage to the body, especially the heart and circulatory system, may already be occurring during pre-diabetes.” HCWHP chose to address this condition because it is easy to detect in screenings and because it re-

GETTING CAUGHT NAPPING

'Shhhhhh!” is an injunction more often associated with libraries than with hospitals. But it’s now being uttered in hushed tones for an hour every afternoon on one floor at DHMC.

The inpatient floors of big hospitals—even Dartmouth-Hitchcock, which was built in 1991 without an overhead paging system in order to reduce noise—are infamous for the constant clatter of cart wheels, beeping of monitors, and background hum of conversation among staff and visitors. The poor patient sometimes finds it impossible amidst all the hubbub to rest, much less take a nap.

But for the past several months on One East at DHMC, every day between 1:30 and 2:30 p.m., the doors of patients’ rooms are closed, the lights are turned down, and silence is enforced on the whole floor.

Although the new regime is reported to be a minor inconvenience for staff, the compulsory quiet is getting glowing reviews—no, make that dim reviews—from patients. A.S.

RX: TAKE A TWO-MILE HIKE

Say “prescription” and most people think of a pill—or perhaps a lotion. But the term has taken on new meaning at Dartmouth-Hitchcock Medical Center, where doctors have started issuing prescriptions for exercise. The scrips—suggesting, say, that a patient take a biweekly two-mile hike—are individualized and just as detailed as orders for medication; they may even come with a trail map.

The project is a collaboration among DMS and DHMC, several local towns and schools, the National Park Service, and a group called the Upper Valley Trails Alliance, which received a $200,000, five-year grant from the Robert Wood Johnson Foundation to support the initiative.

Dr. Charles Brackett, an assistant professor of medicine, is director of the new program. The concept behind it is that the more specific a directive is, the more likely it is that patients will follow it. The program will also involve medical students who have volunteered to make calls to patients to offer follow-up encouragement. So that would be “Take two hikes and we’ll call you in the morning”? A.S.

These posters are all over DHMC to promote a new staff-health initiative.
Cancer Center branches out both south and north

It can take less time than brewing a cup of tea to receive a radiation therapy treatment. But it can take many hours for some cancer patients, especially those in rural areas, to travel to appointments to see specialists or to get treatments such as radiation therapy. Since public transportation is spotty or nonexistent in rural areas, this can be inconvenient, not to mention exhausting and expensive.

Doctors at DHMC’s Norris Cotton Cancer Center have long been aware of this problem. Ever since the Cancer Center’s establishment in 1972, Dartmouth oncologists have held outreach clinics all over the region. But patients have still had to drive to DHMC to get some treatments or to participate in clinical trials—which can mean a two- to three-hour trip on a weekly or even daily basis.

But now, with one initiative to the south and one to the north, Dartmouth is greatly expanding its commitment to bring the latest cancer therapies to patients throughout the region. In February, Norris Cotton opened a newly renovated 4,000-square-foot space at the Dartmouth-Hitchcock Clinic in Manchester, N.H. And Norris Cotton Cancer Center-North, a brand new $7.5-million facility under construction in St. Johnsbury, Vt., is projected to open in September 2005.

Both facilities will offer the research-based care that is a hallmark of Norris Cotton—which has been designated since 1990 by the National Cancer Institute as a comprehensive cancer center. Most clinical trials and all but a few very complicated protocols or those requiring hospitalization will be available at the new sites. In both locations, says Dr. Mark Israel, Norris Cotton’s director, “we’ll save area cancer patients and their families hundreds of hours, thousands of miles, and untold travel expense. More important, cancer patients will no longer be forced to make health-care decisions based on their ability to travel.” Some patients in remote towns have felt compelled to set their chemotherapy or radiation schedules—or even decide what kind of treatment to receive—based on travel considerations.

Tailor: Israel emphasizes that “we work collaboratively with area hospitals and health-care providers, to tailor our services and expertise to meet the community’s specific needs.” Patients may, for example, visit one of the new sites to see a specialist but then receive chemotherapy at a hospital even closer to their home. In fact, eight community hospitals in northern Vermont and New Hampshire collaborated with DHMC in developing the Norris Cotton-North project.

Dr. Marc Gautier, the Cancer Center’s assistant director for regional affairs, models this philosophy in his own practice. In addition to his administrative responsibilities, Gautier sees patients one day a week in other locations, such as New London and Lancaster, N.H.

It’s at academic medical centers like DHMC where researchers develop the latest treatments, Gautier explains. For example, “we’re finding the switches that turn cancers off and on.” Still newer treatments, he adds, involve the genetic engineering of molecules and proteins tailored to an individual patient’s particular cancer—achievements considered impossible just a few years ago. Such breakthroughs can take from two to five years to reach oncologists in community hospitals, however. But now residents of northern New England don’t have to wait—or drive—to benefit from such advances.

John Milne
New affiliation will bring med students from NYC to DMS

This fall, students from a New York City medical school will be taking a close look at the DMS campus to see if they’d like to spend their third and fourth years in the hills of New Hampshire. At the same time, DMS will be taking a close look at the students—from the Sophie Davis School of Biomedical Education at the City College of New York.

Ultimately, about five Sophie Davis students will join DMS’s third-year class in June 2007 to begin their clinical clerkships. Most of them will likely be from racial and ethnic backgrounds underrepresented in medicine—relative to the composition of the general U.S. population—and from economically depressed neighborhoods in New York City. But the Sophie Davis students will bring more than just added ethnic and socioeconomic diversity to DMS.

Fresh infusion: “They’re going to bring some different approaches to problems and issues and infuse our students in the third-year class with some fresh and different ways of thinking about medical problems, especially public-health problems,” explains Dr. David Nierenberg, senior associate dean of medical education at DMS.

At Sophie Davis, medical students complete a B.S. degree and the first two years of medical school in five years. They then transfer to one of six four-year medical schools in five years. They then transfer to one of six four-year institutions.

INVESTIGATOR

Michael Whitfield, Ph.D.
Assistant Professor of Genetics

Whitfield joined the DMS faculty in 2003. He uses a genomic approach to study both basic biology and disease—including scleroderma, a degenerative condition that affects the skin and internal organs.

How did you decide to become a scientist?
I found molecular biology fascinated me more than any other subject I studied in college. I took every biochemistry and molecular biology course they would let me into as an undergraduate. My entry into genomics came from a desire to combine computational and quantitative thinking with molecular biology. As I pursued the technology, it has taken my science in directions I could not previously have imagined.

What famous person, living or dead, would you most like to spend a day shadowing?
People who are the absolute best at what they do have always fascinated me. I would like to have been able to shadow former UNC-Chapel Hill basketball coach Dean Smith. He motivated his players to accomplish amazing things, taught the fundamentals, won games season after season, and did it all in a calm, collected manner and always with integrity. He always struck me as someone who’d be able to teach amazing life lessons.

What about you would surprise most people?
I once considered becoming a herpetologist—someone who studies reptiles and amphibians. Growing up in North Carolina, I knew every local species in the Southeast, had read every book I could find in the library by the time I was in middle school, and ended up giving lectures to day camps and kindergarten classes—with an armload of snakes as props. It’s probably best that I chose genetics!

What do family and friends give you a hard time about?
For ordering both my coffee (Peet’s!) and my wine directly from California—we all have our weaknesses.

What’s the last book you read?
Tuesdays with Morrie by Mitch Albom, the amazing story of a dying professor giving his final lessons about life to one of his best students.

What book do you keep meaning to read?
Charles Darwin’s Origin of Species. It has been on my list for years.

What’s your favorite nonwork activity?
It is a split between rock climbing, skiing, and just being outdoors in general. Dartmouth has such a wonderful outdoor tradition, which makes it the perfect place to do top-quality science and have lots of outdoor adventures.

What are the greatest frustration and the greatest joy in your work?
My greatest frustration is that once you become faculty you don’t get to do as much science as you used to. Science has become so driven by the chase for funding that many of us spend much more than half of our time as fund-raisers rather than as scientists or teachers. I find my greatest joy to be mentoring others, both in my laboratory and through teaching. I hope I can teach the fundamental scientific lessons as well as my mentors taught them to me.

What advice would you offer to someone contemplating going into your field?
Biology is quickly becoming an information science. The modern biologist must be as comfortable at the computer as at the [lab] bench. I advise anyone contemplating a career in the biological sciences to expose themselves to and consider formal cross-training in a quantitative discipline such as mathematics, statistics, computer science, or physics as well as in biology.
Beloved otolaryngologist Dudley Weider dies . . . with his scrubs and his skis on

Everybody loved Dr. Dudley Weider. His family, his friends, his colleagues, and his patients. And he loved all of them. “Dudley was one of the best friends I’ve ever had,” Willem Lange told the packed church at a memorial service for Weider. “I admit to a brief pang of jealousy every time I realized that hundreds of other people felt the same way. He seemed to be everybody’s friend!” Weider, a professor of surgery at DMS, died suddenly of a heart attack on February 18. The 66-year-old endurance athlete collapsed mid-stride as he was skate-skiing into the Dartmouth Grant in northern New Hampshire. He was on his way to meet Lange and some other friends for a weekend of cross-country skiing.

Weider was the consummate adventurer. He loved cross-country skiing, hiking, mountain climbing, canoeing, fishing, and biking. But he was the consummate physician, too. His easygoing nature put patients instantly at ease. “He was unstinting of his time and effort on their behalf,” says Dr. J. Oliver Donegan, chief of otolaryngology. “He made sure his patients had his home phone number, and he encouraged them to call if they were concerned and they needed his reassurance.”

Few people realized that Weider, who joined the Dartmouth faculty in 1974, was known internationally for his work. “Dudley was very modest about his achievements,” adds Donegan. But “he was an innovative surgeon and he pioneered and introduced many new surgical techniques and procedures.”

**Tonsils:** In addition to removing tonsils and adenoids, Weider treated patients with spinal fluid leaks in the ear; surgically removed obstructions in the nose and throat to alleviate sleep apnea; and determined why the removal of tonsils could sometimes stop bedwetting. “He realized that the large tonsils created a sleep apnea, and this did something to the antidiuretic hormone in the pituitary,” explains Dr. Nathan Geurkink, a fellow otolaryngologist.

As busy as he was professionally, Weider always found time for the out-of-doors. He skied through Alaska on the 200-mile Iditarod Trail; crossed the Arctic Circle by canoe; skied 240 miles across the Greenland ice cap; competed in the first marathon in Antarctica; and participated in the annual Canadian Cross-Country Ski Marathon.

“He was always an inspiration to me because he had done . . . almost outrageous endurance events,” says former Dartmouth ski coach John Morton, who wrote about Weider’s adventures climbing Alaska’s Denali, the highest peak in North America, for the Winter 1999 issue of Dartmouth Medicine. “He’d hear about something like that and say, ‘Boy, that would be kinda neat.’ And he’d go off and do it.”

On the Greenland trip, even when howling winds and 30-below temperatures forced several members of the expedition to quit, Weider was indomitable. “He was like a bulldog—he would never give up,” says Dr. Eric Sailer, a retired DMS ob-gyn who, along with several others, was helicoptered out. The guides begged Weider to consider leaving, too, because his feet were in bad shape. But Weider just borrowed a larger pair of boots that fit over his swollen feet and continued.

Sometimes he brought work along, like on a canoe trip down the Leaf River in Canada. At the end of each day, he’d sit and draft journal articles, oblivious to his exhausted companions who had collapsed beside him. “I can get my mind around it here because there are no phone calls, no emergencies,” Weider told John Hannon, another member of that expedition. Weider, Hannon, and Sailer were all members of the Dartmouth College Class of ’60.

As focused as Weider could be, however, he was notoriously forgetful. “His absent-mindedness was legendary,” Lange said at the memorial service. “Nobody in the world but Dudley could have accidentally tangled his wedding ring in his fishing line and trolled it behind him in the water for several hours.”

**Legendary:** His concern for his patients—or for anyone who was ill—was legendary, too. “I think he was born to be a healer,” recounted Lange. “If you were sick or blistered or bleeding, Dudley was there. And there was always a follow-up call to see if you were better. He wouldn’t let go of it until you were.”

He may not have been ready to let go of life yet, but his friends and family agree that he lived his days to their fullest. The week he died, he had seen patients; done surgery; attended a grandson’s basketball game and a granddaughter’s talent show; and was on his way to spend a weekend with good friends doing what he loved.

“He died wearing his uniform—his green scrubs [under] his Johnson woolies, his L.L. Bean flannel shirt, his red suspenders, his headlight . . . his skis and ski boots,” said Weider’s son, David, at the memorial service. “He wouldn’t have wanted it any other way.”

L.S.C.
medical schools through a process similar to the National Resident Matching Program, which pairs medical school graduates and residency programs in a way that factors in both parties’ preferences. Of Sophie Davis’s partner schools, DMS is the only one outside New York State.

Feel: Dr. Stanford Roman, dean of Sophie Davis and a 1964 graduate of Dartmouth College, proposed the partnership with Dartmouth in 2003. Roman believed, explains Nierenberg, that some of his students would welcome the opportunity to attend a medical school “in a very different geography and with a very different feel . . . [just] as he really loved going to Dartmouth College.” Roman’s familiarity with Dartmouth also includes having been deputy dean of DMS in the early 1980s and having served as a Dartmouth College Trustee. After several discussions to work out the details of the matching process, Dr. Stephen Spielberg, DMS’s dean, and Roman recently announced the agreement.

Roman was also drawn to

VITAL SIGNS

In this section, we highlight the human side of clinical academic medicine, putting a few questions to a physician at DMS-DHMC.

Alan Rozycki, M.D., Professor of Pediatrics
Rozycki, a Dartmouth College ’61 and DMS ’63, is a general pediatrician with particular interest in attention deficit hyperactivity disorder, spina bifida, and HIV. He has been on the faculty since 1972.

What made you decide to become a physician?
When I was an undergraduate at Dartmouth, I was interested in doing research in the biological sciences and actually was accepted to a number of graduate programs. Then I started to date a young woman who lived in Norwich and I was convinced it would be best to stay around here. So I started in the medicine program with an idea of getting an M.D.-Ph.D. After two years, I went to Harvard, where I had two wonderful clinician teachers and fell in love with clinical medicine. So it was for the love of a woman initially, and for the love of medicine secondarily.

If you weren’t a physician, what would you like to be?
An adventurer-explorer like Indiana Jones. I love archeology and ancient societies and there’s just no question at all I would love to do that.

What is the most exciting place you’ve ever been?
Cambodia. There’s a group of beautiful 8th- to 13th-century temples at Angkor Wat.

What’s the most recent book you’ve read?
I’m in the process of reading a history of India, in preparation for going to India. It’s very good, very intriguing, and I’m disappointed in how little I knew about India and how little other cultures are emphasized in our Western education. I read a fair amount, I stay up with current events, and it’s surprising to me to see things talked about that are of great import to other places, and important things in terms of world history, that I’ve never even heard about.

Where has your interest in the world come from?
I think that my interest in internationalism arose when I was in the military from 1968 to 1971. I was stationed in Holland during the Vietnam War. Being in Europe and traveling around opened my eyes to a lot.

What do family and colleagues give you a hard time about?
I think that I can be a pain in the butt because I’m too impatient and often too exuberant. I’m a good listener with my patients. I’m not a good listener with my friends and family. And I think I talk too much. This is part of my New Year’s resolution, to try and listen better.

Do you have a medical mentor?
Kurt Benirschke. Kurt was a professor of pathology here at Dartmouth.

I’d call him up at 2:00 in the morning saying, “Kurt, I’m leaving medical school. I can’t take any more.” And Kurt would say, “Let’s have a cup of coffee.” He’d try to convince me to stick around. His argument was that if you want to be a great scientist in human biology, getting your M.D. could open so many other doors. And he convinced me after 10,000 cups of coffee.
Dartmouth Medicine also turned to . . . says that physician-assisted suicide laws are really ‘an apology for a failed medical system,’” noted Harper’s magazine in an article about the right-to-die debate. “Byock advocates a change that he considers ‘more controversial than assisted suicide,’” continued the article, “which is to require medical residents to do a rotation in palliative care and pain management” of at least 100 hours. “Physicians can graduate and be licensed and really have almost no training in pain management,” Byock explained to Harper’s.

“Fevered reaction to a recent warning from the National Institutes of Health that the over-the-counter painkiller Aleve might cause heart attacks may be overblown, some medical experts say,” began a December Wall Street Journal article. One expert, “Dr. Elliot Fisher, director of health policy research at the Center for the Evaluative Clinical Sciences at Dartmouth, said he was troubled by the possibility that science wasn’t behind the decision to halt the study and publicize the findings. I have not seen their numbers, but I would be disappointed if there were not careful thought given to the statistical significance of the differences that were found,”” he told the Journal.

“Dr. James Bernat, a Dartmouth Medical School professor of surgery who is leading the screening effort.”

Among the people and programs coming in for prominent media coverage in recent months was DHMC’s director of palliative medicine. “Dr. Ira Byock . . . says that physician-assisted suicide laws are really ‘an apology for a failed medical system,’” noted Harper’s magazine in an article about the right-to-die debate. “Byock advocates a change that he considers ‘more controversial than assisted suicide,’” continued the article, “which is to require medical residents to do a rotation in palliative care and pain management” of at least 100 hours. “Physicians can graduate and be licensed and really have almost no training in pain management,” Byock explained to Harper’s.

“The growing popularity of expensive, high-tech diagnostic scans prompted a federal advisory committee to suggest “that Medicare change the way it pays for such imaging tests, with an eye toward saving money,” the Pittsburgh Post-Gazette reported. “The advisory committee studied whether Medicare recipients who received more scans . . . had better outcomes.” They didn’t. “That’s not surprising to Dr. Jack Wennberg, director of the Center for the Evaluative Clinical Sciences at Dartmouth,” the article said. “In general, increased spending on technology results in more tests being performed, not better outcomes for patients. . . . The people in high-cost, high-capacity regions have worse outcomes than those in low-cost, low-capacity regions,” Wennberg said.”

But more technology sometimes appears to be warranted. A recommendation from a federal task force was behind a bill introduced in Congress under which “most American men and women over 65 would be eligible to have Medicare pay for a simple ultrasound screening test for potentially lethal abdominal aortic aneurysms,” according to an article in the Wall Street Journal. “‘People with a family history, both sisters and brothers of people with aneurysms, are at the highest risk,’ said Dr. Robert Zawalak, a Dartmouth Medical School professor of surgery who is leading the screening effort.’”

The New York Times reported on a brain-imaging study suggesting that people in persistent vegetative states may “in fact hear and register what is going on around them but be unable to respond.” Experts warned that the new research “did not mean that unresponsive people with brain damage were more likely to recover,” the Times noted, but “the study did open a window on a world that has been neglected by medical inquiry. This is an extremely important work, for that reason alone,” said Dr. James Bernat, a professor of neurology at Dartmouth.” The Orlando Sentinel also turned to Bernat, for comment on a brain-damaged Florida

**VITAL SIGNS**

Jennifer Durgin
woman kept alive against her husband’s wishes. The Sentinel said that Bernat, the “former chair of the American Academy of Neurology’s ethics committee, conceded physicians can only make reasonable judgments about a patient’s awareness ‘because we can’t get into their minds.’”

A DHMC sleep specialist made the news several times in recent months. In the Pittsburgh Post-Gazette, “Dr. Michael Sateia, president of the American Academy of Sleep Medicine, noted that the American Academy of Pediatrics now recommends that pediatricians screen all children for snoring, which can be a sign of sleep problems. ‘This is part of a growing recognition of the importance of healthy sleep and sleep disorders in childhood.’” Sateia was also quoted in the Los Angeles Times, on the danger of off-label antidepressant use to treat insomnia, and by United Press International (UPI), on the need for more research on insomnia. “Many challenges remain in the characterization, recognition, and treatment of insomnia,” he told UPI.

In an article about consumer surveys of hospitals, the Wall Street Journal noted, “Dartmouth Medical School is also expanding distribution of its ‘How’s Your Health?’ online survey, which has been used by groups including the military and state health departments for several years and will be offered more broadly through nonprofit and business groups to consumers later this year.” Noted the Journal, “‘Dr. John Wasson, who developed the survey, says that users can also now create their own free portable medical record using the site.’”

“The years from 18 until 25 and even beyond have become a distinct and separate life stage, a strange, transitional never-never land between adolescence and adulthood, in which people stall for a few extra years.” So said a recent Time magazine feature. Why are there so many twenty-somethings who refuse to grow up? the article wondered. “The human brain continues to grow and change into the early twenties, according to Dr. Abigail Baird, who runs the Laboratory for Adolescent Studies at Dartmouth. ‘We as a society deem an individual at the age of 18 ready for adult responsibility,’” Baird told Time. “‘Yet recent evidence suggests that our neuropsychological development is many years from being complete.’”

In February, when the 2005 Academy Awards rekindled controversy over the way Hollywood glorifies smoking, the Associated Press noted that “a Dartmouth Medical School study last year found that children who watch movies in which actors smoke heavily are three times more likely to smoke themselves than those exposed to less on-screen smoking.” Discover also referred to the research: “‘All things being equal, whether their friends or parents smoke, the amount of R-rated movie watching is a strong predictor of smoking among kids,’ says Dr. James Sargent, the Dartmouth Medical School professor who led the study. . . . ‘Kids imitate their heroes, and the movies supply heroes to kids.’”

Exploring why Spokane, Wash., “has one of the highest rates of hip replacement surgery in the nation, 50 percent higher than the national average,” the Associated Press (AP) wrote that it “has more to do with the local doctors’ preferences than with medical need, according to Dartmouth Medical School researchers who study regional variations in health care.” AP went on to quote Dartmouth’s chair of orthopaedic surgery. “Medicare pays for most hip replacements, which cost from $18,000 to $20,000, so regional variation is a public policy issue, said Dr. James Weinstein. . . . ‘Joint replacement is one of the most effective procedures done in medicine,’ Weinstein said. ‘But just because it’s really good, should it be overutilized?’”

A partnership between DHMC and an organization called the Upper Valley Trails Alliance caught the eye of the national press. “Just a few months old and already earning praise, the program involves several dozen doctors writing detailed, albeit symbolic, prescriptions for getting fit and then giving patients trail maps to accomplish it,” wrote USA Today. “‘The idea is to make a more specific explanation,’ said Dr. Charles Brackett, director of the program at Dartmouth-Hitchcock Medical Center in Lebanon, N.H. . . . Studies show that the more concrete a doctor’s advice, the more likely a patient is to heed it.”

“Is it possible that we place too much faith in pictures?” asked Malcolm Gladwell in the November issue of New Yorker magazine. He was referring to medical images and used mammography as one case in point. “Dr. Gilbert Welch,” Gladwell wrote, “a medical-outcomes expert at Dartmouth, has pointed out that, given current breast-cancer mortality rates, nine out of every thousand 60-year-old women will die of breast cancer in the next 10 years. If every one of those women had a mammogram every year, that number would fall to six. The radiologist seeing those thousand women, in other words, would read 10,000 x-rays over a decade in order to save three lives—and that’s using the most generous possible estimate of mammography’s effectiveness.”
Music becomes a healing memorial

Ten years ago, Michael Whitman’s teenage son took his own life. Ever since, the Lyme, N.H., resident has found comfort in music. Now he’s trying to help others appreciate music’s healing power. He’s compiled 83 songs about pain and loss—such as Tom Paxton’s “No Time to Say Goodbye”—into a three-volume CD collection titled Before Their Time. Recently, he played some of the cuts from the collection at a grand rounds presentation at DHMC.

“Michael is really helping to start a movement,” says Dr. Joseph O’Donnell, a professor of medicine at DMS. “Hopefully, [he] is going to show the providers at DHMC . . . how music can be used as a therapeutic tool.”

Music is already heard throughout the Medical Center every day. Patients and visitors can listen to tunes being played on the Steinway grand piano that sits in a central area. Patients can choose music they would like to hear through headphones during cancer treatments. Music is an essential component of complementary services, such as reiki massage, according to Deborah Steele, support services coordinator at DHMC’s Norris Cotton Cancer Center. And some people have even organized music services for loved ones—like the one that family members and coworkers held for nursing education director Ellen Ceppetelli after she was seriously injured in a sledding accident a few years ago. So when O’Donnell suggested that Ceppetelli ask Whitman to make a presentation at DHMC, she wasted no time in issuing the invitation.

The next step, hopes Dr. Ira Byock, director of DHMC’s palliative medicine program, may be for DHMC to hire an experienced music therapist to help create a formal music therapy program as part of the palliative care service. He envisions a professionally administered version of Whitman’s type of program, as well as support for those who are nearing death—the kind of music service that could “anoint a person who is dying, almost as a sacramental gesture of bearing witness to this sacred event.”

In the meantime, Whitman is planning to take the presentation about his Before Their Time CD series on the road, “because I think it really does have a very wide appeal.” M.P.L.
mouth College Faculty/Employee Assistance Program, was recognized for exemplary service to the International Association of Employee Assistance Professionals in Higher Education.

Elinor Stalker, R.N., an emergency room nurse at Cheshire Medical Center/Dartmouth-Hitchcock Keene in Keene, N.H., was recently presented with the New Hampshire Emergency Nurse of the Year Award.

Dartmouth Medical School’s Community Service Committee, a multi-project, student-run initiative, was a recent recipient of the Dartmouth College Social Justice Award. Accepting the award on behalf of the student body were three DMS students: Matthew Laquer, Jennifer Levin, and Elizabeth Wallis.

Valley Regional Healthcare, the parent organization of Valley Regional Hospital in Claremont, N.H., became the 12th member of the Dartmouth-Hitchcock Alliance. The Alliance is a regional network of hospitals, mental-health centers, and home-care agencies in Massachusetts, Vermont, and New Hampshire.

The New Hampshire Healthy Kids Corporation recently selected Dartmouth-Hitchcock Medical Center as one of its “Business Partners of the Year.”

The Foundation for Healthy Communities recently honored Dartmouth-Hitchcock Medical Center with its New Hampshire Health Access Network Leadership Award. The Health Access Network is one of the foundation’s initiatives and is aimed at helping low-income residents of the state get free and discounted care.

New on the bookshelf: Recent releases by DMS faculty authors

Molecular and Cellular Insights to Ion Channel Biology. Edited by E. Edward Bittar, M.D.; and Robert Maue, Ph.D., professor of physiology at DMS; Elsevier; 2004. This book explores ion channels through genetic, biochemical, electrophysiological, and other types of research. It looks at how the function and dysfunction of channel molecules have furthered understanding of their physiological roles. New perspectives include the immunology of the glutamate receptor and aquaporins as ion channels.

Microbial Biofilms. Edited by Mahmoud Ghannoum, Ph.D.; and George O’Toole, Ph.D., assistant professor of microbiology and immunology at DMS; ASM Press; 2004. This book covers the biology of biofilms from their development, antibiotic resistance, and architecture, to their roles in infectious disease. It encompasses bacteria and fungi and includes chapters on genetic exchange and biofilms, hospital-acquired infections, biofilms and implant infections, and the history of the development of the biofilm concept.