There was an SRO crowd on hand for DMS's Match Day festivities in March. 1 Gaetan Habekoss, right, was calm, cool, and collected as he strolled up to get word from Dean Stephen Spielberg that he’ll be training in family medicine at UCLA. 2 Amanda Gann, left, and Brett Chevalier were all smiles about the fact that they’ll both be doing ob-gyn at Harvard’s Beth Israel Deaconess Medical Center. 3 An exuberant Michael Pirozzi and Cheryl Shannon were among the students in the Brown-Dartmouth Program who chose to get their Match results at DMS. 4 And it was clearly good news for, from the left, Jodi Leverone, Meredith Sorensen, and Lisa Ernst that they’ll be staying at Dartmouth for the next stage of their medical education.

JUST WHAT THE DR. ORDERED

Dr. Charles Brackett and his colleagues in DHMC’s Section of General Internal Medicine have been using a novel way to get patients to exercise. Rather than offering them gentle reminders, or even insistent suggestions, about the benefits of exercise—advice that all too often falls on deaf ears—Brackett commits his counsel to paper and actually writes prescriptions for regular exercise.

The “take two miles and call me in the morning” approach appears to be working. Brackett observes that his exercise prescriptions are translating into fewer medication prescriptions for conditions such as high blood pressure and cholesterol. “I get excited when I see patients who have lost 20 or 30 pounds and they are able to come off medications,” he says.

COUGH DROPS AT DHMC

Dartmouth-Hitchcock Medical Center is breathing a collective sigh of relief after stanching an outbreak of pertussis, or whooping cough—a highly contagious bacterial infection of the respiratory tract.

The first cases, identified in March, were traced to a new employee in the clinical labs. DHMC’s infection control team gave preventive antibiotics to all staff in the labs, but by mid April—when clusters emerged in other departments—the team stepped up the offensive. Any staff with possible symptoms were screened by Occupational Medicine and barred from pediatric units, since pertussis can be deadly for infants. And in early May, the team began vaccinating all employees. Most infants and children get vaccinated, but immunity usually wears off by late adolescence. In fact, until last fall, no adult vaccine was even available. Ultimately, 135 DHMC employees were diagnosed with pertussis and more than 4,500 were vaccinated. As for patients, the team is still tracking down those who may have been exposed, but the number infected appears to be very low.

The team also launched several studies during the outbreak, including one to assess how quickly the new adult vaccine takes effect. The studies, explains Dr. Kathryn Kirkland, associate director of infection control, are a great example of “how to turn an outbreak into a learning experience.”
Gifts totaling $7 million will go to palliative care

The last months, weeks, and minutes of one’s life do not have to be filled with loneliness, fear, and pain: this is the promise of palliative care. But fulfilling that promise takes coordination, time, and resources: this is the challenge of palliative care.

Now, thanks to two recent gifts totaling $7 million from the Jack and Dorothy Byrne family, meeting those challenges at DHMC will be a little easier. The Byrnes, of Etna, N.H., have committed $5 million to establish an endowed chair in palliative medicine and $2 million for the ongoing work of DHMC’s Palliative Care Program.

“At one time,” says Dr. Ira Byock, director of palliative care, “academic medical centers and the clinicians who work within them were sheltered from the pressures of time and revenue generation that clinicians in private practice experience. But in today’s world, the pressures of time and money are impinging on all of us.

“A five-minute procedure in the emergency department, for instance,” says Byock, “is better compensated than hours I might spend at the bedside of a seriously ill patient with his or her family. And so philanthropy is very important in allowing us to practice and teach the state of the art in palliative care.”

The multidisciplinary palliative care team at DHMC works to address the social, emotional, spiritual, and physical needs of patients who are critically ill. The Byrnes’ gifts are helping the team expand both its staff and the services they offer. One new service is the No One Alone program, in which trained volunteers “sit with patients in the hospital,” explains Byock, “to alleviate the sense of loneliness and boredom and sometimes anxiety that people feel during the very long hours” near the end of their lives.

Alone: Such loneliness is what first inspired Dorothy Byrne’s interest in palliative medicine. About 20 years ago, her son was being treated for cancer at a hospital in New York and she noticed that some patients had neither family members nor friends at their bedside. “That was my induction into seeing a lot of people having to battle their disease alone,” says Byrne. Over the years, she and her family have become more and more involved in supporting palliative care at DHMC. They decided to establish the endowed chair after meeting with Byock last summer.

“His reputation of course preceded him,” says Byrne of Byock. Still, “I was impressed when I met him.” Byock has been a hospital physician for more than 20 years and is a leader in the field. He was recruited to Dartmouth in 2003, and since then the Palliative Care Program has flourished. Staffed 24 hours a day, seven days a week, it logged 2,178 inpatient visits and 912 outpatient visits in 2005—increases since 2003 of 345% and 57%, respectively.

Cause: Dorothy Byrne recognizes the importance of having “someone as motivated and dynamic as Ira” leading the effort. Establishing an endowed chair “makes a powerful statement that we’re devoted to the cause,” she adds. She believes Byock’s presence and her family’s ongoing support will also enhance Dartmouth’s ability “to recruit [other] talented people, [if] they know there is such a powerful thrust behind this cause.”

“I had a number of opportunities [elsewhere] to practice and build a palliative care program,” Byock admits. But “as I traveled and interviewed and spent time in various medical centers, I was struck by how ready and ripe Dartmouth seemed to transform health care . . . Now, having been here for over two and a half years,” he adds, “I can tell you that nothing has diminished my confidence that we can change the world, right here.”

A Q&A with Byock is at dartmed.dartmouth.edu/summer06/html/vs_gift_we.php.

Jennifer Durgin
James Varnum, the president of Mary Hitchcock Memorial Hospital for 28 years, never hesitated to personally thank employees who went the extra mile to serve patients and improve care. In the same spirit, the James W. Varnum Quality Health Care Endowment was established by the MHMH Trustees upon Varnum’s retirement.

Each year, the endowment—which Trustees hope will reach $1 million—will recognize a national leader in health-care quality improvement, plus one or more DHMC employees or volunteers who exemplify quality health care. The awards will be presented at an annual or biennial conference at DHMC that will highlight best practices at medical centers across the country.

Although Varnum retired in April, the principles that he stood for will endure thanks to the endowment—and to the culture he left behind. For more on Varnum’s tenure, see “Leading a Shared Endeavor” in the Spring 2006 issue of Dartmouth Medicine or at dartmed.dartmouth.edu/spring06/html/leading.php.

**A WORD ABOUT AWARDS**

Four more awards will soon adorn the walls of the DMS Office of Publications. Judged one of the best academic medical center magazines in the country, DARTMOUTH MEDICINE earned a 2006 Award of Excellence from the Association of American Medical Colleges. And Jennifer Durgin, the magazine’s senior writer, won not just one but two Will Solimene Awards for Excellence from the American Medical Writers Association—for “Are We Hunting Too Hard?,” the cover feature in the Summer 2005 issue (pictured at left), and a profile in Fall 2005 of Dr. Ann-Christine Duhaime, Dartmouth-Hitchcock’s chief of pediatric neurosurgery.

In addition, a book project that the publications office oversaw—The Science We Have Loved and Taught: Dartmouth Medical School’s First 200 Years, by Constance E. Putnam—also received a Solimene Award. The book, described in a recent review as “nuanced” and “imaginatively researched,” is available at www.upne.com.

Trying not to rest on its laurels, the publications office has just begun to develop online multimedia enhancements to the print edition of DARTMOUTH MEDICINE. See dartmed.dartmouth.edu/summer06/html/we.php for this issue’s WEB EXCLUSIVES.

**A summer camp that offers more than s’mores**

Hello, Mudda. Hello, Fadda. / Here I am at Camp Hitchcock. / The other kids are just like me. / We see past disability.

For more than 20 years, children with chronic rheumatologic conditions have been writing home with messages along those lines from Camp Dartmouth-Hitchcock. The mission of the camp—which was established by the late Dr. Joshua Burnett, founder of DHMC’s rheumatology section—is to give such kids “a true camp experience,” says Dr. Kevin Kerin, the current camp director.

Held for one week each summer at the Hulbert Outdoor Center on the shores of Lake Morey in Fairlee, Vt., the camp hosts up to 40 campers from age 8 to 17. They engage in all the usual camp pastimes—from swimming, canoeing, and fireside sing-alongs to games, ropes-course activities, and arts-and-crafts projects.

Though we do need to distribute medications, and we have two nurses who are here full-time,” explains Kerin, a rheumatologist, “we try not to make it about that.” And the results, he says, are “just tremendous.”

Doing more: Over the course of the week, the campers become willing to do more and more on their own, while asking for help when they need it. “In their daily lives, in their families and in their schools,” says Kerin, people might “assume that they can’t do as much as they might be able to. It’s not that we really press them or stress them. We just allow them to tell us what they need rather than assuming that we know.”

“My parents were pretty cool about not letting me use my disease as an excuse,” says Kathryn Runge, who attended the camp for five years and now returns.
OH, BABY!: Dartmouth now offers one of the most generous parenting policies for graduate students of any institution. It provides up to 12 weeks at full stipend for a birth or adoption, and up to an extra year to finish a degree.

Most dogs would be perfectly content to spend their days home alone gnawing on whatever’s handy—chair legs or sofa cushions, for example. But most dog owners would prefer that their pets confine themselves to chewing on things not quite so valuable—dog toys, for example. The problem is, most dog toys get boring pretty quickly.

Dr. Tabitha Washington, a DHMC resident in anesthesiology, had just such a problem with Remy, her Chesapeake Bay retriever. Remy spent a lot of time alone while Washington and her fiance, Michael Jones, were at work. Conventional dog toys bored Remy, so she did the kinds of things dogs do when they’re bored.

Washington applied some creative thinking to the problem. What sort of toy would keep Remy engaged all day—busy enough not to be tempted by chair legs? Something that dispensed treats would be good. Something that made getting treats fun would be even better. Something that made getting treats an all-day job would be just about perfect.

Thus the TreatStik was born. Washington sketched her concept—a short piece of hollow, indestructible* PVC pipe, perfectly sized to fit a dog’s mouth, with a hole in the end just large enough to dispense one small treat at a time as the toy is rolled around. Jones constructed a model out of parts from the hardware store, then they enlisted a rapid-prototype machine at Dartmouth’s Thayer School of Engineering to extrude the first TreatStik.

The concept proved workable, so Washington and Jones found a manufacturer in California; designed product labels, a website, and advertising; and recruited Washington’s mother as their distribution agent.

While resident is at work, she finds it’s a dog-eat-TreatStik world

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The early product-development phase was, Washington admits, a busy time. “In the beginning, I’d stay up late at the hospital, and then come home and stay up even later” working on the website. But things are now a “little more balanced,” she says. While Washington completes a fellowship in pain management next year, she plans to also develop some more products, including treats specially designed to go in the TreatStik.

That will be welcome news to Brady, Washington and Jones’s new “very hyper” puppy—a Weimaraner-Lab mix—as well as to the roughly 10,000 dogs who are currently enjoying Washington’s invention. M.M.

* The TreatStik was field-tested by Dartmouth Medicine’s reporter on Pippin, an Australian shepherd who belongs to Inger Imset, the office manager for Dartmouth-Hitchcock’s Department of Obstetrics and Gynecology. If Pippin couldn’t bend, break, destroy, or get bored with the toy, there’s not a dog out there who can.

Jennifer Durgin
**FANS OF CHINESE CULTURE**

Getting all the ingredients in a lab experiment just right is crucial to a successful outcome. Similarly, getting all the ingredients in the dumplings just right is key to a successful Chinese New Year celebration, says Dr. Song Lin, a biochemistry research associate at DMS. Jiaozi, as Chinese dumplings are known, call for pork, cabbage, bamboo shoots, and assorted spices, all wrapped in a thin dough.

“Dumplings are a very important food in Chinese New Year celebrations,” says Lin. As the president of the Upper Valley Chinese Professional Club (UVCPC), Lin organized the group’s 2006 Chinese New Year festivities—which were attended by nearly 300 people. Also on the menu were sour-sweet salmon (a symbol of abundance) and oyster-sauce-braised spare ribs with garlic sauce.

In addition to food, the gathering featured a Chinese history quiz and various presentations—from a demonstration of Chinese calligraphy to a performance by Dr. T.Y. Chang, chair of the DMS Department of Biochemistry, of the song “On the Jiang-Ling River.”

The UVCPC has grown from 15 members in 1989 to over 200 today; its ranks include people who have emigrated from China, Americans of Chinese heritage, and individuals who have adopted Chinese children. The club even began a Chinese school in 1996, where about 150 students from age 5 to 40 have learned Chinese language, history, and traditions.

“People get together to see some Chinese,” people, explains Lin, “to feel at home, to talk about life here [and] how life is changing back in China.”

**GIFT FROM CLOSE-KNIT CLAN**

When Dale “Hoss” Lewis, a Pomfret, Vt., farmer and logger, died of an adenocarcinoma at age 41 last November, his family was heartbroken. But from heartbreak came inspiration. The family has since then begun to raise funds in his memory as a benefit for Dartmouth’s Norris Cotton Cancer Center—by knitting and selling “Hoss Hats.”

The hand-knit acrylic and wool hats have not only helped raise over $1,000 for the Cancer Center, but they’ve also given Lewis’s family a positive and productive way to channel their grief. “It makes us feel we’re helping out in some way,” explains Lewis’s aunt, Ann Bassett. “It’s better than sitting around crying.”

**MAKING PRE-PREGNANCY A PERPETUAL MINDSET**

If the Centers for Disease Control and Prevention (CDC) gets its way, American women will start receiving prenatal care long before they ever get pregnant. In April, the CDC’s Morbidity and Mortality Weekly Report contained national recommendations meant to improve the health of all women of childbearing age, so if and when they decide to have children they’re more likely to give birth to healthy babies.

About 85% of U.S. women receive prenatal care—after they get pregnant. Yet the U.S. ranks 26th among developed nations in infant mortality and has higher rates of low-birth-weight babies and premature births than comparable countries.

**Plan:** The report also recommends that everyone of childbearing age, men and women, develop a reproductive life plan describing if and when they intend to have children. And it advises pre-pregnancy checkups to discuss long-term reproductive health. “Having a baby is a choice,” says Little, and doctors should take that choice into account whenever they bring up...
HEART-SMARTS: High school biology students from Hanover, N.H., and Hartford, Vt., got a chance in May to use a defibrillator in a cardiac simulation lab, to feel a real pig’s heart, and to hear a presentation by Dr. Alan Kono, a DHMC heart-failure specialist.

**VITAL SIGNS**

A faculty member told the are invulnerable,’ [a DMS faculty member told the Times]. . . Though criticized in some quarters, . . . Dartmouth’s leadership in educating students about AIDS. ‘Some students think they are invulnerable,’ [a DMS faculty member told the Times]. . .

Six years after AIDS was identified, the first mention of the disease appeared in these pages: “An education supplement in the New York Times . . . hailed Dartmouth’s leadership in educating students about AIDS. ‘Some students think they are invulnerable,’ [a DMS faculty member told the Times]. . . Though criticized in some quarters, . . . Dartmouth’s program is at the forefront of higher education’s response to AIDS, according to the executive director of the American College Health Association.”

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**Initiatives show that the devil is in the details**

Sometimes the best way to improve health care is not by prescribing fancy drugs or buying expensive equipment, but simply by paying attention to details. That seems to be the bottom line of two successful infection-reduction efforts at DHMC and of another that’s under way.

In 2003, Melissa Bennett, nurse leader of DHMC’s hematology-oncology special care unit (HSCU), set out to reduce infections among bone-marrow transplant (BMT) patients. She and her colleagues had noticed that a lot of BMT patients had to have their central lines removed because of infections. A central line is a catheter placed in a large vein, usually in the chest, instead of in a peripheral artery, such as in the arm.

“For this patient population,” says Bennett, “it is a huge [problem] not to have a central line because we give them high-dose chemotherapy through it, blood products, antibiotics, all sorts of things, along with the actual stem-cell reinfusion.”

Lines: Bennett found that 60% of BMT patients had to have their lines taken out. This translated into 17 bloodstream infections for every 1,000 catheter-days. Though they could find no national benchmarks for central-line infections in BMT patients, Bennett and her colleagues in the HSCU and interventional radiology—where the lines are inserted—agreed that they could do better.

Over the next two years, with the support of a quality improvement grant through DHMC, Bennett and fellow nurses Judy Ptak and Debra Hastings examined every aspect of central-line implantation and maintenance. They found that often patients weren’t getting the right kind of line because of miscommunication between the unit and interventional radiology. So they created a standard ordering system with common language.

They felt that dressing and maintenance procedures could be improved, too, so they designed a new protocol and trained staff in it. They also added an antimicrobial dressing that costs a mere $7.

These interventions were neither high-tech nor expensive, but they were extremely effective. “The goal,” explains Bennett, “was to get our catheter-related bloodstream infection rate less than 10 per 1,000 catheter-days. In fact, there has been just one in a year and a half.

Word of the HSCU improvement project spread quickly throughout DHMC and inspired other units to take similar action. While Bennett’s project was gaining momentum, physicians and nurses in the intensive care nursery (ICN) began working to reduce catheter-related bloodstream infections in their unit. They focused on such basics as regular and thorough hand-washing among staff and patients’ families, encouraging breast feeding (which strengthens babies’ immune systems), reducing the number of intravenous connections on a central line, and, whenever possible, shortening the length of time a line remains in.

The ICN gauged success by the number of consecutive days without a single infection in babies weighing less than three pounds or born more than 10 weeks early.

Run: “Previously, the average [run] had been around 10 to 15 days,” says Dr. William Edwards, ICN section chief. “When we started the project, after the first few months, we began to see runs that were up in the 30 to 40 days. Then between May and mid-December [2005], we had a run of over 200 consecutive days without an infection in this group of babies.” The ICN’s goal was to halve the infection rate for this group, but they far exceeded the goal, reducing the rate from 40% to 6% (for more on ICN quality improvements, see the feature starting on page 28).

Another bloodstream infection reduction initiative is now
Residents make themselves right at home

Physician house calls are making a comeback—especially for the elderly. Although declared a vanishing practice 10 years ago, the number of U.S. house calls has risen from 1.4 million in 1998 to over 2 million in 2004, according to the Journal of the American Medical Association. About a year ago, Dartmouth-Hitchcock began requiring its general internal medicine residents to make house calls on geriatric patients.

Routine: Dr. Adam Schwarz, who heads the DHMC house calls project, suspects that many elderly people postpone coming in to have a routine checkup or even to see a doctor when they are ill because they are too frail to travel easily or lack transportation. Instead, they wait until they get so sick that they wind up in the emergency room or a hospital bed.

Although many patients are reluctant to ask their physicians to call on them, they “are universally appreciative [of] seeing doctors in their home,” Schwarz says. Residents appreciate the opportunity to make house calls, too. They learn firsthand how patients’ lifestyles or living conditions may help or hinder their illness, he explains. They are then better able to assess patients’ functional status and to evaluate them for depression and cognitive impairment.

The household gets a “check-up,” too. For example, the residents keep an eye out for tripping hazards, such as electrical wires stretched across a floor. They also assess patients’ hygiene and nutritional status, evaluate their transportation and support systems, and check for other factors that can provide insights into their health.

House calls add “another dimension to the ability to assess a patient’s health risks to allow us to make health-care recommendations,” says Dr. Sally Scott, a third-year resident.

The residents also make follow-up phone calls to “help solicit from the patient any concerns they have” about their health, says Schwarz. This allows doctors to map a patient’s progression between visits.

Although assumed by some to be an unaffordable luxury, house calls can actually be an economical option for patients who can’t afford—or choose not—to reside in a nursing home, Schwarz adds. In recognition of that fact, Medicare’s reimbursement rate for house calls has increased in recent years.

Choices: That’s all to the good, Schwarz feels. For example, he says, “nursing homes are great places for half of their residents,” but the other half would be better off in their own homes, if they had a good support system and proper outpatient care.

“You economic status doesn’t predict successful aging,” says Schwarz, but “it enhances options and choices.”

The DHMC house calls project, which received initial funding from the New Jersey-based Arnold P. Gold Foundation, is a collaborative effort of the General Internal Medicine (GIM) Residency Program and the Dartmouth Center for Aging. Each GIM resident is required to take part in at least three house calls during his or her residency, as part of a team made up of an attending physician and one or two other residents.

Some 300 elderly residents of the Upper Valley are participating in the project as patients.

Relationships: Schwarz observes that he has found—from making about 100 house calls a year himself—that “80% of house calls is dialogue” with patients. “Even a brief sensitization to house calls,” he maintains, increases physician awareness of the needs of geriatric patients and cultivates better doctor-patient relationships.

Laura Evancich

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

John Wennberg, M.D., the director of Dartmouth’s Center for the Evaluative Clinical Sciences, was once again named to Modern Healthcare magazine’s annual list of the “50 Most Powerful Physician Executives in Health Care.” He was ranked 43rd on the list this year.

James Weinstein, D.O., a professor and chair of orthopaedic surgery, received the Wiltse Lifetime Achievement Award from the International Society for the Study of the Lumbar Spine. The award goes to a scientist, clinician, or researcher who has made major contributions to the advancement of knowledge in the field of spinal disorders.

William A. Nelson, Ph.D., an associate professor of psychiatry, was granted an honorary doctorate of humane letters by Elmhurst College in suburban Chicago. A 1968 graduate of Elmhurst, Nelson was recognized for his teaching and scholarship in health-care ethics.