



JON GILBERT FOX

**Diane Harper headed a vaccine trial whose results she terms "incredible."**

cancer. About 500,000 cases of cervical cancer are diagnosed worldwide each year, and an estimated 280,000 women die from it, mostly in developing countries. In the U.S., about 20 million people are carriers of HPV, which causes more than 10,000 cases of cervical cancer and nearly 4,000 deaths a year.

Harper, an associate professor of community and family medicine, has spent 20 years researching cervical cancer. "The first discovery that HPV was even related to cervical cancer was published in 1975," she notes. In 2004, Harper was optimistic that a cervical cancer vaccine would be available by 2010, based on the results of successful clinical trials, including one that she led between 2000 and 2003, with 1,113 women, ages 15 to 25 (see the Winter 2004 DARTMOUTH MEDICINE for the results of that trial, published in the British journal the *Lancet*).

**Trials:** But the results of three Phase III clinical trials, one of

which she's directing, have been so promising that the FDA decided to accelerate the approval process. "The very first of that data was reported and showed that the vaccine was a hundred percent effective and completely safe," says Harper. "There were no adverse effects other than having pain in your arm from getting the shot. And that is based on a trial of 20,000 women." Other large trials, with thousands of women all over the world, have shown results that are just as promising.

**Teens:** Harper anticipates that the vaccine, which is administered in a series of three shots over several months, could be ready as early as the summer. Ideally, it would be given to girls aged 10 to 13 years, before they become sexually active. HPV infection typically occurs in the late teens and early twenties. "So when you take your daughters in for their school physicals next summer, they should be asking for the vaccine at the same time," she says.

Harper is one of the physician-researchers on Merck's and Glaxo's scientific advisory panels, which are responsible for the independence of the studies. She is not paid by either company but helps to design the studies, review and analyze the data, and publish the papers.

Harper shared another piece of exciting news: "The *Lancet* called me," she confides in hushed tones. "They woke me up and said, 'We want to publish your next results.' We're really excited about it."

Laura Stephenson Carter

## From resident of the NICU to NICU resident

**D**r. Bethany Lovejoy Ames started life as a four-pound preemie in Dartmouth-Hitchcock's Neonatal Intensive Care Unit (NICU), under the care of Dr. George Little. Today, she's back in the NICU—as a second-year pediatrics resident, caring for babies far smaller than she was. And her preceptor is none other than her former caregiver, George Little.

**Twin:** Ames and her twin brother came into the world six weeks early, at 34 weeks' gestation. "Thirty years ago, 34 weeks was considered high-risk," she observes. "Now, we're caring for babies [born at] 24 weeks."

The stronger of the twins, she needed only three weeks in the NICU, but her brother stayed there for four months. Both are now healthy adults, and they grew up hearing about the critical role Little and others played in the first weeks and months of their lives. "My parents think the world of George Little," says Ames, a 2004 graduate of Dartmouth Medical School. "There's even a picture of him in our baby books. That's how I recognized him when I started my residency!"

Though it might seem that Ames was born to be in pediatrics, it wasn't until her freshman year in college, at Brown, that she realized she wanted to care for sick children. After graduation, she taught chemistry and physiology for two years before entering DMS.

**Hope:** While she's proud of her history with Dartmouth's NICU, Ames doesn't mention it to her patients' families. "The baby is the focus, not me," she says. But if parents learn of her story and bring it up, she's happy to talk about it. "It's a nice connection I have with families that other residents don't get to experience," she observes. "It gives them hope. They often say, 'If you turned out this well, maybe my baby can, too.'" A.P.



ETHAN SQUIRREL GRAPHICS

**Beth Ames, left, started life in the NICU in the care of George Little, right.**