VITAL SIGNS

When Dr. Brian Sites, a DHMC anesthesiologist, began offering ultrasound-guided nerve blocks four years ago, he anticipated that patients would choose it over general anesthesia whenever possible. Many people did. But Sites did not anticipate two problems. First, one person can’t do the procedure alone—someone has to hold the ultrasound probe, while someone else injects the anesthetic. And it can be tiring to hold the probe steady, so the images are often unclear. “Ultrasound exams are ergonomically challenging, and the operators get fatigued,” explains Sites, who is now the director of DHMC’s Center for Ultrasound Guided Regional Anesthesia (UGRA). “This fatigue results in movement of the ultrasound probe, causing degradation of the ultrasound image,” which makes it difficult to know where to insert the needle.

Undaunted, Sites and Dr. Brian Spence, a fellow anesthesiologist who is also a graduate of Dartmouth’s Thayer School of Engineering, collaborated with the Dartmouth Entrepreneurial Network; Katherine Hickey, another Thayer alum; and a local consulting company to come up with a solution: the Ultra-Stand, a probe-stabilizing device.

Steady:

Now, a clinician can administer UGRA without help because the Ultra-Stand holds the probe steady. The anesthesiologist sees a precise image of where to inject the medication. “One of the benefits of using UGRA,” says Spence, “is that you can actually see where you’re placing the local anesthesia, where with other traditional techniques you can’t.”

Before the invention of UGRA, anesthesiologists relied on anatomical “landmarks” to determine the location of the nerve to be numbed. But that technique is limited because anatomical variations among pa-

MAKE THAT THE DACGME

No, really, there’s no move afoot at Dartmouth to co-opt the Accreditation Council for Graduate Medical Education (ACGME). It just seems that way.

The ACGME accredits 7,800 U.S. residency programs, which train 100,000 residents in 27 specialties. It’s a huge national organization, but at its September 2006 meeting, held in Rosemont, Ill., there was a significant Dartmouth presence: Drs. Elliott Fisher and Tina Foster gave keynote addresses; former DHMC executive vice president Paul Gardent was elected to the organization’s executive committee; Dr. Worth Parker, director of graduate medical education (and chair of the ACGME’s Institutional Review Committee), gave a presentation to the Council of Committee Chairs; and it was announced that Dr. Paul Batalden will receive the 2007 John C. Gienapp Award to honor his outstanding contributions to graduate medical education.

That’s on top of the fact that Dr. David Glass received the Gienapp Award in 2006 for his work chairing the committee that implemented national residency work-hour standards. And that Dr. Richard Dow received the ACGME’s Parker J. Palmer Courage to Teach Award in 2005.

Maybe the organization should just plan on holding its 2007 meeting at Dartmouth.

A WINTER WONDERLAND

This winter, middle-schoolers in New Hampshire’s Mascoma Valley School District will enjoy skiing, ice-skating, and other outdoor activities thanks to the efforts of DMS third-year students Rahim Nazerali and Ashlee Logan. Nazerali and Logan, who were among DMS’s 2005-06 Albert Schweitzer Fellows, joined forces with Mascoma Valley health educators last spring to organize a winter-gear drive as part of their Schweitzer project. The goal of the project was to help in the fight against childhood obesity in New Hampshire. “Childhood obesity was an area that both Ashlee and I felt needed attention,” says Nazerali. One of the biggest barriers to physical activity at this time of year, he explains, is the high cost of winter sporting gear.

Thanks to the highly successful drive—which netted 30 pairs of cross-country skis, 55 pairs of ski boots, 22 pairs of ski poles, 21 pairs of ice skates, and 2 pairs of snowshoes, plus assorted other pieces of equipment—Mascoma students will have a fun . . . and active . . . winter this year.

Ultrasound invention is out-stand-ing

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POWER UP: New Hampshire magazine put Frank McDougall, vice president of government relations at DHMC, on its 2006 “It List” of Granite State movers and shakers, saying he “knows the corridors of power” and is “always straddling party lines.”
tients make finding the nerves difficult and potentially dangerous. The anesthesiologist might have to insert the needle more than once, causing significant discomfort for the patient. “If you can see where your target area is, you don’t have to use as much local anesthetic, because you don’t have to saturate the area,” says Spence.

Aaron Gjerde, a consultant who is working on a business plan for the device, calls it “a simple solution that just worked. It isn’t complicated, doesn’t need training, and doesn’t need expertise.” The Ultra-Stand has gone through numerous iterations in the past year, says Hickey. Several patents are pending for the device, and several major distributors and companies are interested in carrying the product, according to Gjerde. Gjerde and Hickey have also received an enthusiastic response from physicians in the American Society of Anesthesiologists.

Psyched: And now Thayer engineering students may be helping to improve the Ultra-Stand. “It’s really the collaborative thing all over again,” says Hickey. “We’re going back and both using Dartmouth resources and adding to some student experiences . . . We’re pretty psyched about that.”

But the bottom line, explains Spence, “was developing a device that would make our lives easier and make the lives of other regional anesthesiologists easier, such that we can improve patient care.”

Danielle Thomas