William Nugent, M.D.: A tall order

By Laura Stephenson Carter

Cardiothoracic surgeon William Nugent, M.D., loves music—so much so that unlike many surgeons, he *won't* allow music to be played in the OR when he's operating. "If I'm listening to music," Nugent says, "I'm going to *listen* to it." It's "almost work," he adds. "If I'm focusing on what has to be done, I can't hear the music. As much as I love it . . . I won't listen to it in the OR."

But when he's not operating, Nugent loves spreading his passion for classical music and serves on the board of the regional opera company, Opera North. He was exposed to opera early by his mother, a trained vocalist who taught music in Morris Township, N.J. She'd have her middle-school students study an opera—its history, composer, and score—and then take busloads of them to the Metropolitan Opera in New York City to watch a dress rehearsal and talk afterwards to the musicians and the conductor. When she died, she left a small trust that Nugent is using to create similar experiences for Upper Valley students through Opera North.

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Nugent's primary passion, however, is cardiothoracic surgery. He got an early start in medicine, too. Though he's the first physician in his family, he was only a sophomore in high school when he founded a group called the Junior Corps at Morristown, N.J., Memorial Hospital. "We'd run around urine samples, work in the emergency room," he says. The experience convinced him to go into medicine.

He went to Franklin and Marshall College in Lancaster, Penn., then to Albany Medical College. "I got in by the skin of my teeth," he admits. "But I did well once I was in medical school." He was tapped to be a member of the medical honor society, Alpha Omega Alpha, and was one of the top 10 students in his class.

So it's no surprise that he's excelled in his chosen profession. What is a surprise is that he decided to go into surgery, because he's left-handed and six feet, eight inches tall. Surgical tools are made for right-handed people. And a tall surgeon is likely to have a sore back after standing for hours bent over an operating table.

Nugent was inspired by the charismatic chief of cardiothoracic surgery at Albany—Ralph Alley, M.D.—even though he almost missed meeting him. Alley was out of the country during Nugent's cardiothoracic surgery rotation. Luckily, Nugent bumped into him in an elevator later that summer, introduced himself, and told Alley how much he had wanted to meet him. "He looked at me and he said, 'Nugent. Hmmmm. Come with me,' and we made rounds," Nugent recalls. "It was a Saturday morning, and I decided at that minute I had to be a heart surgeon. The guy was just unbelievable. I spent the rest of my fourth year hanging around the cardiothoracic service."

Alley assumed an interest in the enthusiastic medical student, took him under his wing, and even arranged for him to do a rotation at the Cleveland Clinic, home of several great heart surgeons.

After getting his M.D. in 1975, Nugent did an internal medicine residency at the University of Boston; a surgical residency at Beth Israel; a surgical fellowship at Mass General; a surgical research consultancy at AVCO Medical Research Laboratory in Everett, Mass.; and a residency in thoracic surgery at the University of Michigan.

"It came time to find a place to work, so I sent the obligatory letters to every single academic program that I thought might want a cardiac surgeon when I was ready to leave Ann Arbor," Nugent says. A few days before he was about to leave for an interview at a hospital in Massachusetts, he received a letter from Stephen Plume, M.D., a now-retired cardiothoracic surgeon at Dartmouth. Nugent tacked on an extra day to the beginning of his trip so he could interview at DHMC. He remembers landing at Boston's Logan Airport at night and watching the city lights disappear in his rearview mirror as he drove north. "I didn't see another light until I arrived in Hanover," he laughs. "I couldn't believe that there would be a place this far away from anywhere."

But he fell in love with what he found at Dartmouth. "I saw an opportunity here that I just couldn't believe," he says. "I felt that there was a work ethic that was tangible the minute you walked in the door. And there was a team spirit that I sensed was unique compared to any other health-care institution I'd been affiliated with. I also felt it was an incredible ground-floor opportunity up here. This is an Ivy League, academic medical school-associated hospital that was trying to find itself. It just seemed like the most ideal practice, except it also seemed like the place you might want to go to to retire. So I couldn't quite sort that out."

He went ahead with his interview at the Massachusetts hospital, which was a high-volume private practice. He tried to convince himself that he ought to work there. But when he called home, his wife realized he'd loved what he'd seen at Dartmouth and encouraged him to accept DHMC's offer.

"I started here in July of 1983—one of the two or three best decisions I ever made in my life," Nugent says. "It's one of the most . . . unbelievably supportive places to work in the world." He started out helping Plume and Charles Marrin, M.D., build an adult cardiac service, and Herbert Maurer, M.D., start a multidisciplinary thoracic oncology program.

Then, in 1987, Nugent helped to found the Northern New England Cardiovascular Disease Study Group (NNE)—a collaboration of cardiac surgeons, anesthesiologists, nurses, and others involved in heart bypass operations throughout Vermont, New Hampshire, and

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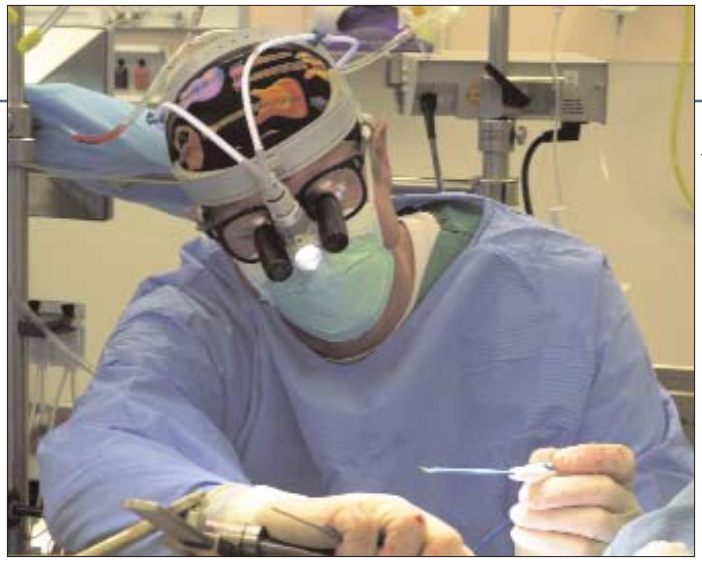

JON GILBERT FOX

It was a tall order, but worth it, for cardiothoracic surgeon Bill Nugent to convince surgeons around the region to share their data; as a result, mortality has dropped 24%.

Maine. The group was created in response to the release by a federal agency of hospital-by-hospital mortality rates for coronary artery bypass graft (CABG—pronounced "cabbage") surgery.

Creating a "study group" may sound innocuous, but achieving a collaborative rather than a competitive spirit among the participants was by no means a foregone conclusion—especially when, in May 1989, the NNE reported a more than twofold difference in CABG mortality rates among its member institutions.

"Although I feared that releasing such sensitive information would incite witch-hunts and gaming strategies that would destroy the consortium, I reluctantly agreed with the rest of the organization to publish our data only after we promised one another that we would use it solely to improve care," Nugent wrote in a 2001 editorial in *The Annals of Thoracic Surgery*.

The participants visited one another's institutions and discovered subtle but definite variations in the way they did cardiac surgery. Through retrospective reviews of vast amounts of data, the members were able to determine things they could be doing differently to save lives. For instance, not all hospitals were using beta-blockers to lower patients' heart rates before surgery—and the data showed such drugs to be helpful. The data also revealed that a patient whose hematocrit (percentage of red blood cells) dropped during surgery was at greater risk of dying. Everyone learned from each another and made adjustments in their procedures. By 2000, the mortality rate for CABG had fallen by 24% regionwide, and there was no statistical difference among the participating institutions. (The work of the NNE has been the subject of two cover features in Dartmouth Medicine—in the Winter 1992 and Summer 2001 issues.)

"I was the operational phase of the research and development that was coming out of the NNE," explains Nugent. His Dartmouth colleague Gerald O'Connor, Sc.D., Ph.D., an epidemiologist, developed prediction rules for CABG risk factors and mortality. "My job," says Nugent, "was to take these rules . . . and try to find a way to integrate them into our clinical practice." He calls his experiences with the NNE project "another one of those wonderful opportunities, similar to meeting Ralph Alley in the elevator that day. . . . We had incredibly brilliant people like Steve Plume and Gerry O'Connor creating these tools out of what had previously been unheard of—data coming from an entire population of patients with coronary disease," says Nugent. "And these tools were in need of somebody to use them."

Nugent was glad to be one of those somebodies. "I live by what my dad taught me—what I call the Bell Tel theory." When he was growing up, his father worked for Bell Telephone—*not*, his dad emphasized, Bell Laboratories. When three Bell Labs physicists won the 1956 Nobel Prize for creating the transistor, "my dad was elated," Nugent recalls. "This was before we ever had transistor radios." But the boy was puzzled as to why his dad was so pleased—after all, he'd always made it clear that the two companies were entirely different. "He looked at me and said, 'You don't understand. *They* developed the transistor, but *I'm* going to put it in people's living rooms. Without me, no one would ever use that transistor. I'm the one who's going to make that transistor useful to somebody.'"

Nugent has played the same sort of role with the NNE model—traveling all over the country to convince other physicians of the wisdom of sharing their data to improve the welfare of patients. "In order to do that, they have to transcend the secondary gains associated with competition," Nugent points out. "In other words, they have to leave their guns at the door . . . their egos at the door, and go in and talk among themselves about the outcomes that they are producing—exposing themselves—whether it be mortality rates or morbidity or things like that. But physicians could do that if they just realized that they were physicians first and businessmen second.

"I still travel around preaching this rather altruistic concept," Nugent continues, "that we're here first to take care of our patients. It certainly worked in this part of the country, and it's gradually taking hold elsewhere."

He has also been involved with an educational effort closer to home. He just stepped down after three years on the town school board in Plainfield, N.H. "I learned an incredible amount," he says. "I was humbled by the bureaucracy that public service and public education requires. I was awestruck by the work the teachers are doing." But as much as he enjoyed the role, he didn't run for a second term. "Too many meetings," he says. "Too many nights when I was on call and there were meetings. When you're on a school board, you can't use the fact that you're important somewhere else as an excuse. You just can't. It's just as important."

As busy as he is, however, Nugent will never abandon his passion for music or his work with Opera North. But he still won't be listening to music in the OR any time soon. ■