

Famed surgeon retires from U-M Bartlett an inventor with great bedside manner

Wednesday, July 6, 2005
News Staff Reporter

Dr. Robert Bartlett, a surgeon who retired last week from clinical practice at the University of Michigan Health System, can count success by the number of lives he's saved and doctors he's trained. So far, they're both in the many thousands.

He is best known for developing the extracorporeal membrane oxygenation machine, or ECMO, a modified heart-lung machine used around the world for patients with acute heart or lung failure. It is used in intensive care units to circulate and oxygenate the blood of those close to death due to trauma, burns, infection or organ failure.

But beyond his renown for the ECMO, people who know him at U-M and around the country say it is his personality and bedside manner that make him special. Described as a brilliant surgeon and researcher who is simultaneously humble and compassionate, he is loved - perhaps revered is a better description - by colleagues and the rank-and-file hospital staff.

Bartlett, 66, isn't exactly quitting his life's work overnight. He will continue to do research at U-M, focusing on the development of artificial organs, a scientific quest that often took a back seat to the daily needs of the surgery practice.

Dr. Steven Rosenberg, chief of surgery at the National Cancer Institute in Bethesda, Md., for the past 30 years, doesn't toss out compliments easily. But superlatives flow easily when he is talking about his friend of 42 years.

"Bob Bartlett is the most remarkable and talented physician-scientist I have ever known," said Rosenberg. "He is a brilliant clinician, a creative and innovative scientist. He has a unique talent to translate the best of modern science to patients. He's passionate about what he does to a degree that is striking and inspiring. Anybody who works with Bob loves Bob Bartlett."

After graduating from the U-M Medical School, Bartlett spent time in Boston and California before returning to U-M in 1980. Bartlett was among the team of four in 1984 who started U-M's Breast Care Center, which has since been copied in many other medical centers and is today a major U-M program. And for the past 25 years, he's run the intensive care units for surgery at U-M. That field, now called critical care medicine, didn't exist when he was a resident.

Forty years ago, when Bartlett was doing his residency at the Children's Hospital in Boston, the mortality for complex heart surgery was about 50 percent. "As residents, we took care of these children, and we knew if they could just get through the operation for two or three days, they'd be all right," Bartlett said. "But many of them died in the first day or two.

"So the whole research on what's called ECMO began simply as an attempt to see what it was about the heart-lung machine itself that's used for heart surgery that caused such serious problems. And in fixing those problems, could we use the heart-lung machine for days or weeks of time?"

In 1975, he treated the first newborn infant with respiratory failure. That's when ECMO technology took off and spread around the world. Bartlett and colleagues have built the world's most experienced and successful ECMO team, training specialists who've gone to medical centers around the world. Of the 30,000 patients treated by ECMO, 26,000 survived.

"We count the results by just plain survival, because this is only used by patients who are going to die otherwise," Bartlett said. "The most useful part of all this research has not been to save those 26,000 patients, but the things we've learned about acute lung failure and acute heart failure that we now apply earlier to those patients. So our most successful patients are the ones who are referred to us for ECMO who get better without it."

Every week or two, he receives a call or letter from someone in Nebraska or Taiwan or Stockholm who says a version of: "You don't know me, but my doctor said you helped invent this treatment." This time of year, he gets lots of senior pictures from graduates who wouldn't have lived past infancy without ECMO.

Alvaro Lopez of Ann Arbor was placed on ECMO 12 years ago when he was just 35 and dying of Legionnaire's disease and pneumonia. Lopez's wife, Marla, recalls a nurse assuring her that, in all the world, Bartlett was the one doctor the nurse would most want to care for her own husband at that critical stage. Bartlett's gentle bedside manner was an important part of Alvaro Lopez's recovery process, he said. "Just the fact of him walking into my room made me feel better," Lopez said. "He was always smiling and had something positive to say. That's important when you're sick. It motivates you to continue fighting to survive."

Dr. Michael Mulholland, the chairman of the department of surgery at U-M, said Bartlett has been the pied piper for a generation of medical students. "He is an incredibly interesting, fun, enthusiastic and charismatic man," he said. "His personality induced more people to go into surgery than otherwise would have happened because they wanted to be like Bob."

He said Bartlett will never point out if a medical student says something wrong. "It'll never be, 'You're wrong,' but 'That's great, but how about looking at it this way?'" said Mulholland. "He has a way of keeping people's enthusiasm up. His favorite expression is, 'Great!'"

Bartlett says his ongoing research has been satisfying and enriching, but there is still a long way to go, in part because his work as a surgeon limited his research time. He is now working on a similar technique to treat liver failure, and an artificial liver, as well as variations of an artificial kidney. He also developed an artificial lung, an implantable device using tiny fibers and the heart's own pumping power to oxygenate blood. It's strictly in the laboratory now, but it should be ready for patients in two or three years, he said.

Interviewed on his first day of retirement last week, Bartlett's emotions were mixed. "It's a very strange feeling after 40-some years to feel for my pager and it's not there, and to worry about what patients I have in the ICU and to realize there aren't any," he said.

But there are perks: There will be no calls or trips to the hospital in the middle of the night. His wife of 45 years, Wanda, a retired special education teacher from Ann Arbor Public Schools, got so used to hearing one side of those middle-of-the-night phone calls, she learned to give her own diagnosis: "Just tell them to drain the pus, and we'll go back to sleep," she once told her husband.

The Bartletts, who have three children and four grandchildren, have no plans to move from Ann Arbor. Bartlett plays the bass in U-M's Life Science Orchestra and also is a member of the Ann Arbor Civic Band.

He recently added "published author" to his resume. Twenty years ago, he wrote a book after appearing as an expert witness in a suspected case of child abuse. He met a Livonia publisher at the Ann Arbor Book Fair last spring who convinced him to get it published. Two months ago, he did. "The Salem Syndrome" is the story of a Detroit man in the 1970s who is convicted of deliberately burning his two young daughters despite the fact that the evidence against him is circumstantial.

And how has he found time for everything?

"Life is short," said the surgeon who has extended the lives of thousands. "You have to pack it in."