



# Operating with Excellence

**L**arry Kraiss '82 is one of the premier vascular surgeons in the western United States and leads a team of researchers at the University of Utah that is trying to discover why plaque forms in artery walls — and how to stop it.

“When you are in medicine and science you make progress in thousands of small steps, one patient and one experiment at a time,” Kraiss says. “You may find one thing and publish it and someone else takes it and adds their little discovery. By the time ten or fifteen people have added something you say, ‘Now we know more than we did.’”

Kraiss performs up to two hundred surgeries per year, runs an active science laboratory and publishes widely in medical journals on advances made in understanding atherosclerosis, the medical term for the hardening of the arteries. But six years ago he confronted his own unexpected diagnosis of cancer, which is now in remission.

“That was a very re-orienting experience,” he says. “I would never wish it on anybody, but at the same time it’s a classic example of everything working together for good.”

Kraiss became interested in medicine during a high school physiology course, and vividly recalls watching a film of pediatric heart surgery. He started working at a hospital as a messenger which allowed him to observe the different units, from the emergency room to the radiology department. He entered Vanguard intent on going to medical school.

“I majored in chemistry and spent a lot of time in the science lab there,” he says. “I owe a huge debt of gratitude to Don Lorange, Larry McHargue and Wayne Peterson. They were

the people who taught most of the courses in my major and they exemplified everything a faculty role model ought to be. They were professional and rigorous in their field, yet took a personal interest in students and modeled the integration of faith and learning in their daily lives.”

Kraiss shone at Vanguard, graduating summa cum laude, earning the President’s Award and giving the senior commencement speech. He was accepted to a number of medical schools and chose Baylor College of Medicine, where he earned his MD in 1986 with highest honors.

“When I got to medical school I felt that my preparation at Vanguard was better than what my colleagues from more prestigious universities had gotten,” he says. “I directly credit my Vanguard professors for the intellectual rigor they brought to the courses they taught.”

In 1986 he and wife **Karen (Klein) '80** moved to Seattle where Larry started his surgical training. While working in a research lab there, he became fascinated with vascular surgery and the blood flow research they were conducting. For two years he helped with the lab’s research, published papers and “had a successful, productive time,” he says. “I realized I enjoyed the scientific method and the process of doing research.”

The experience prompted him to become an academic surgeon and to focus on vascular surgery, which involves operating on arteries and veins either with traditional open surgery or by using a catheter to repair vessels with balloons and stents. The purpose is to restore blood flow to a particular organ.

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In the lab: Kraiss leads a team of researchers at the University of Utah Medical Center.

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enough blood supply to survive,” says Kraiss. “You operate to improve blood flow through or around it. That’s how you rescue the organ. The blood vessels are like the fuel lines to the body. The engine won’t work if the fuel line is clogged.”

In the lab, Kraiss also encountered one of the main problems in vascular surgery:

invasive vascular laboratory at University of Utah Medical Center. The Medical Center serves the largest geographic area in the U.S. and has a busy air ambulance service, due to the vast region it covers and the prevalence of outdoor sports such as mountain biking, rock climbing and skiing.

In the late '90s the Kraisses helped start an

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how and why do vessels have a scarring response, called re-stenosis, after being operated upon or cleared of plaque? And what can be done to keep vessels from narrowing due to scar tissue within a couple of years of surgery?

“That was the primary problem we were working on, and it’s still not a completely solved problem,” says Kraiss. “It bedevils a lot of what we do.”

After finishing his training in Seattle, Kraiss and his wife and children moved to Salt Lake City where a position at the University of Utah had opened up which allowed him to pursue both surgery and research. He soon became the chief of the division of vascular surgery at the university, as well as a professor of surgery, the program director for the vascular surgical residency and the medical director of the non-

Assembly of God church, Capital Church in the City, in downtown Salt Lake City, and they remain “tremendously happy” there.

“It has been a very rewarding experience all around,” he says.

The church’s support became especially important when, six years ago, Kraiss learned he had cancer.

“The diagnosis came out of the blue,” he says. “I had planned for a normal physical. They did some blood tests and told me I had cancer.”

He underwent an operation which cleared the disease, but Kraiss went through a time of prayerful introspection. He had become accustomed to working long days, and now realized he had given other parts of his life short shrift.

“You can defer gratification so much that

you miss smelling the roses,” he says. “The cancer diagnosis was a real wake-up call. You won’t live forever. I felt that if I didn’t change some of these habits I would seriously regret the consequences at the end of my life. It was easy to justify how I spent my time because I was helping people. But it was more rationalization than necessity. I struggle with this even now, after the cancer and all the revelations about myself and my work habits that the cancer produced, but I have a better perspective now.”

He was also helped by Rick Warren’s book, *The Purpose-Driven Life*.

“I can’t tell you how reassuring that book has been to me,” Kraiss says. “Basically, you will live as long as God needs you to live to do what He has set out for you to accomplish. I take great comfort in the fact that no matter how bleak things look or how frightening something is, we will be here as long as God needs us to be here.”

Today Kraiss continues to publish widely in medical journals and is a reviewer for the *American Journal of Physiology*, *Annals of Vascular Surgery* and *Circulation* among

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## Vanguard's alma mater

Emil Balliet, a San Diego pastor and longtime member of SCC's board, came to campus in 1964 to lead the prayer at the baccalaureate service. He was celebrating his daughter Judy's graduation amidst an historic moment for the college, which had recently received regional accreditation. In the transition to its new status, the college had, in addition to other improvements and innovations, constructed a new science building and library, added academic programs, instituted an honor society and adopted a new motto. But Balliet believed something else was needed — a college anthem, an alma mater.

He was well qualified to write it. An accomplished violinist, he had graduated from a Minneapolis music school, served as a choir director and written numerous songs and choruses. Balliet understood the school's long history of preparing foreign missionaries; he

knew that the term "Vanguard" had been adopted for the school's athletic teams, and he knew that the school's new motto was "truth, virtue, service." Over the following months he fused these elements into an appropriate alma mater and sent a manuscript copy to the SCC music department.

But it arrived as the department was in transition, and the manuscript was effectively ignored. Then, in 1966, **Darrell Gardner '69**, a talented trumpeter in

his second year at SCC, was asked to direct the college band and given the Balliet manuscript for possible use. He wrote the necessary orchestrations and that spring the new alma mater was first used at the spring baccalaureate service. The next year the band began playing the alma mater at the end of SCC's home basketball games. When the spectators joined in singing its lyrics, a tradition was begun. Over the following years the alma mater was also used for other college functions, and by 1970, when Emil Balliet was elected to serve as the school's fifth president, it had become an integral part of college life. Few people realized that he had composed the alma mater.

When Noel Wilson joined the music department in 1975, he recognized the alma mater's quality and wrote the required arrangements to enable the college choir and orchestra to perform it. For two decades it was sung and played at graduations, academic convocations and other such occasions until the change to Vanguard University made its lyrics inapplicable. But for many alumni, the moving strains of the old alma mater still evoke strong memories:

*Southern California, alma mater true,  
hail to our College, hail to the gold and blue.*

*Ever in the vanguard, valiant for our Lord,  
virtue, truth and service, loyal to his word.*

*Tho' thy sons and daughters, journey far and wide,  
tender thoughts and memories lovingly abide.*

*Southern California, alma mater true,  
hail to our college, hail to the gold and blue,  
Hail, Hail, Hail!*



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others. He has received several research awards, including the Lifeline Foundation Research Award, and was named the 1997 Wylie Scholar in Academic Vascular Surgery. He is also Vanguard University's Alumnus of the Year for 2009. He and Karen have three children: David, 20, Jonathan, 16, and Karla, 13.

"The Lord has blessed us here very much," Kraiss says. "I feel like he placed us here. I derive a tremendous amount of satisfaction from going to the clinic, seeing the patients and applying my profes-

sional skills to their medical problems, and doing it in a compassionate and humane way. I recognize that they are individuals with concerns and anxieties about what

gets the best I have, both professionally and in meeting their needs as a person. The training for that extends back to Vanguard. It comes by having a certain

"It's my goal to make sure that everyone gets the best I have, both professionally and in meeting their needs as a person."

their medical problem means to them and their family, and at the same time I have to be honest and straightforward with them. It's my goal to make sure that everyone

attitude about the world and your place in it. Christians are put in the world to honor God and benefit their fellow man. I try hard to live that out on a daily basis."