Talking To The Titans

COBE LABORATORIES & VALLEYLAB

our founding fathers of Colorado's medical device industry talk about the early days and why Colorado is "absolutely" the right place to be.

By Bob Griff and Jere Paulmer

Cobe Laboratories

A 1967 move to Colorado by a small southern California business named Cobe Laboratories launched the state's first outstanding success story in medical equipment manufacturing. That story carries on today through the global leadership of Gambro, AB.

Bob Collins and Ran Bellows founded
Cobe Laboratories in Glendale, California
to respond to a pressing clinical need.
Heart lung machines were a new
technology, and a Los Angeles hospital needed special tubing
to connect their machine to open-heart surgery patients.
Collins and Bellows worked with the hospital to develop a
heart lung plastic tubing pack.

They soon saw an opportunity in custom tubing that larger companies overlooked. "Open heart surgery was beginning to expand," remembers Collins, "and our timing couldn't have been better."

Two years later it was time to expand a thriving business. But land was expensive in Los Angeles. Another problem, says Collins, was that "product shipments of less than full trucks took 24 to 30 days to reach our East Coast customers." Collins had lived in Denver. He understood the advantages of its central location and lifestyle. He began making inquiries.



Top: Cobe Laboratories'
Bob Collins & Ran Bellows circa 1970.
Bottom: Valleylab's
Robert Anderson & Fred Ayers
circa 1970.

In response, Forward Metro Denver, a predecessor to the Metro Denver Economic Development Corporation, sent representatives to visit Collins and Bellows. "They put us in touch with real estate, financing and sourcing professionals," Collins says.

Collins and Bellows negotiated a lease with purchase option for a building constructed to their specifications on 11 acres in Lakewood. "Colorado's lower costs gave us the opportunity to have our own facility in

a community we would enjoy living in," Bellows says.

At home in Colorado, they redefined themselves. No longer just tubing set manufacturers, Cobe Laboratories would now focus on the evolving new therapies that would require new technologies. This became the company's driving force and organizing principle for the years of dramatic growth ahead.

But first they had to recruit an organization to achieve that mission. "Rather than just going for experience, we concentrated on people who shared our values and wanted to learn and grow," Collins says. They succeeded, says Bellows, because "talented people at all levels were attracted to the opportunity to contribute to improved therapies." Many came from the University of Colorado.

Cobe's Bob Collins, retired and hip-deep in his favorite fishing hole, in Tasmania.



In time, Cobe Laboratories had two laboratory and production facilities located in Lakewood and neighboring Arvada. "These communities were good locations for quality production workers," Bellows says, "and we continued to attract more through word of mouth."

Cobe Laboratories developed an innovative systems approach to product development that blended disposable plastics and electromechanical equipment. "There are many similar requirements which apply across therapies," commented Collins. Multidisciplinary technical teams moved easily from one therapy application to another. "Each team worked with medical specialists to ensure that we were meeting their needs," he says.

The company's systems approach was first used to develop products for the extracorporeal therapies used in nephrology. Based on a prototype dialyzer it acquired, Cobe Laboratories refined the technology and later introduced its own Century system used in hemodialysis.

The company also innovated from an acquired technology to produce the Cobe BCT therapeutic plasma exchange system used in blood banks. By the late 1980s, the company had formalized its business emphases into four divisions: nephrology, cardiovascular, blood component technology, and international.

By 1990, annual sales for Cobe Laboratories were \$250 million. It employed 2,300 people worldwide and was Colorado's largest medical equipment manufacturer. That year, Gambro, AB, a global medical products company based in Sweden, acquired the company.

The acquisition brought together two companies from separate worlds with common interests. By 1998, Gambro was transformed into a fully-integrated company providing both equipment and services in the area of cardiovascular, renal and extracorporeal therapies. A significant portion of Gambro's growth was due to its dialysis services business, Gambro Healthcare, a 565-clinic business area that Gambro sold late last year to DaVita. The move allowed Gambro to return to its roots as a medical technology company focused on products and treatment systems.

"We're proud of the growth and innovation Gambro has always displayed, and we're confident we are well positioned to strengthen our leadership in renal and cell-based therapies, products and services," said Kevin Smith, President of Gambro, Inc., a holding company for Gambro's businesses in the U.S.

The Lakewood-based Gambro BCT and Gambro Renal Products continue to employ a combined Colorado workforce of 1,500. The entrepreneurial spirit that first lured Collins and Bellows to Colorado lives on in Gambro.

Valleylab

In the late '60s, Karl Mills, a scientist and Denver based distributor for pacemaker giant Medtronic, recruited Fred Ayers, a fellow distributor in Virginia, and Robert Anderson, an electrical engineer from Medtronic's home office in Minneapolis, to develop and distribute electronic medical devices for Valleylab.

By 1970, under the guidance of Anderson, Ayers and a handful of others, the company's innovative design for a solid-state electrosurgical generator was fast becoming the standard of care in surgery. Valleylab was on a meteoritic rise to global leadership.

"There were many challenges in those early days," said Anderson recently from his home in the foothills outside of Boulder. "First of all, there were no road maps in the medical device field on what to do and how to grow, so we had to chart our own course. From a technology standpoint, we were pushing the envelope in terms of semiconductor reliability. What's more, unlike today, there was an absence of venture capital resources, so we had to be creative about financing right from the start."

Creative thinking would continue to be a hallmark of the company. It spearheaded one of Boulder County's only revenue bond initiatives to underwrite the development of the company's new facilities in the Longbow Industrial Park located north of town, where Valleylab has continued to reside since 1976.



From left to right, Valleylab's Fred Ayers and Robert Anderson

"The regulatory environment in the medical device field was in its infancy," commented Anderson. "In the early '70s, when we wanted to validate product efficacy in a certain procedure or technique, we simply recruited a competent surgeon who wanted to try something new. It's a much more difficult proposition today to bring a medical product to market. Surgery was still reimbursed on a cost-plus basis, totally unlike today's capitated reimbursement structure. Our timing was perfect!"

With a simpler regulatory environment, market-driven costs, the company's leading edge technology and the right people in management, Valleylab was on a fast track to success. "Having the right people is the key to success in any new endeavor," said Anderson. "The first few hires will make it or break it. It's been my experience that good people tend to hire others like themselves. Or to put it another way, if you hire some pigeons at the beginning, don't expect any eagles to join the flock. In great part, Valleylab was a wonderful experience and success because of the founding management team. They brought 100 percent to the

job every day, and they hired people who shared their commitment."

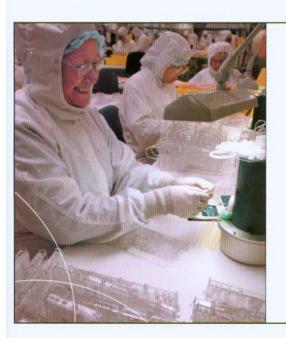
For 10 years, fellow founder Fred Ayers directed marketing and sales as vice president for the company. "In the early days, we had to overcome considerable skepticism that our smaller box could actually perform at least as well as the much larger tube-type generator that had dominated the electrosurgical marketplace for over 20 years," said Ayers. "We succeeded in the challenge, not only because of our technology, but thanks to the best sales organization in the world. Based on our experience with Medtronic, we knew who the influential surgeons were and we focused on meeting their needs.

"Boulder was a very good energy base for the early Valleylab," continued Ayers. "The University of Colorado and IBM were already providing a strong economic foundation for the community. And we were able to secure critical support services locally, like plastics injection and molding capabilities that would help to fuel the growth of our disposable product business. Boulder

was also home to many talented product designers and software engineers who also helped sustain our growth."

In fact, if he had to do it all over again, "I'd absolutely choose Boulder," says Ayers. "It met the needs of Valleylab very well."

The innovations by the early founding fathers of Colorado's medical device industry created a lasting legacy. Today over 160 medical device companies make their home in Colorado. Many of their executives can trace their success back to Cobe or Valleylab. The tradition of medical device invention, high quality innovation, quality manufacturing, and leadership those companies started lives on in Colorado's thriving medical device community.



Progress: It's in our blood

At Gambro BCT, Gambro Renal Products and Navigant Biotechnologies we bring together the right people and products to meet the complex needs of our markets—which include blood and cell based therapies, renal and intensive care and pathogen reduction.

Founded almost 40 years ago, we have grown to become a global

leader in developing innovative approaches for patients and donors by improving processes and developing cutting-edge products. For our patients, this means better outcomes and an improved quality of life.

For more information about Gambro, visit us at www.gambro.com.

