



# THE INNOVATOR

From inventions that have transformed the surgical field, to a nonprofit that supports up-and-coming medical device companies, Dr. Thomas Fogarty's fingerprints are all over the health care world. (And don't forget about his winery!)

STORY BY ROBIN HINDERY

**D**r. Thomas Fogarty has been quintessential Silicon Valley since long before that description meant anything. The acclaimed Bay Area cardiovascular surgeon, inventor, and winemaker is a born innovator, a quality that was evident at an early age in his native Cincinnati, when he turned a passion for model-building into a lucrative business selling his creations to friends for about four times what he spent on the kits.

"Some people see opportunities that nobody else sees. I'm one of those kind of guys," the 79-year-old shared during a recent interview at the Fogarty Institute for Innovation, the educational nonprofit he founded to provide support to promising inventors and researchers seeking to improve medical technology and, by extension, patient care. The independent organization opened in 2007 on the campus of El Camino Hospital in Mountain View—a home Fogarty selected because of its relatively small size and its close proximity to expert physicians. "Those taking care of patients are the ones who understand patients' needs," he says of the importance of collaboration between medical professionals and engineers. "You can't be a lone ranger anymore in this day and age."

Colleagues characterize Fogarty as a team player, but he admits his constantly churning mind can cause him to be a bit preoccupied with his own thoughts. Of course, that busy brain is responsible for a staggering array of innovations: more than 130 medical patents over the past 40 years, most notably the Fogarty balloon

embolectomy catheter, which he developed as a medical student in the late 1950s and patented in 1969, the year he began teaching surgery at Stanford University. Decades later, the catheter, which removes blockages from blood vessels using a thin inflatable balloon, remains an industry standard.

In a 2006 interview with *Stanford Medicine Magazine*, Fogarty explained what inspired his groundbreaking invention: "In the 1940s, I was working as a scrub technician for Good Samaritan Hospital in Cincinnati, handing instruments to the surgeons during the summer off from high school. When people had a blood clot in their arm or leg, they usually ended up having three operations. Fifty percent of the patients died. I thought there must be a better way." After graduating from Xavier University, he pursued his medical degree at the University of Cincinnati, working on the initial prototype for the balloon catheter in his attic between study sessions. "Essentially, I cut the baby finger off of a surgical glove and tied that onto the end of a catheter with fly-tying techniques I learned as a boy," he recalled. In 2001, Fogarty was inducted into the National Inventors Hall of Fame, which credited his famous catheter with "revolutioniz(ing) vascular surgery and encourag(ing) advances for other minimally invasive surgeries, including angioplasty."

Fogarty was hardly content to stop at a single invention—even one that cemented his legacy in the medical community—and he also wanted to help clear the path for others like him. In 1980, he formed Fogarty Engineering, Inc., a private investment group in Portola Valley that engages in designing and developing new medical devices. He has since served as founder/co-founder or board

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member of more than 30 medical device companies, the majority of which were based on products fostered by Fogarty Engineering.

“In the medical device area, we cannot afford to innovate in the United States beyond the initial stages. Sixty to 70 percent of devices are made in whole or in part offshore, which is a lot of money and jobs lost,” he laments. “We’re no longer the leader in medicine here in the U.S., so that’s what we are trying to do (at Fogarty Engineering and the Institute for Innovation): get things going in the right direction.

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While dreaming up ways to improve surgery for both patients and doctors, Fogarty continued to maintain his own practice and also teach the next generation of surgeons. He stayed at Stanford from 1969 until 1978, and then spent 15 years in private practice and directing the Cardiovascular Surgery program at Sequoia Hospital before returning to Stanford in 1993 as professor of surgery. He remains an adjunct clinical professor at Stanford Medical Center, but has shifted much of his focus in recent years to Fogarty Engineering and the Fogarty Institute for Innovation.

Even those not familiar with the balloon embolectomy catheter or Fogarty’s start-up incubators may be familiar with his work in another, somewhat surprising industry: winemaking. (Yes, he finds time for that, too!)

Fogarty was first introduced to the wine industry upon arriving at Stanford, when he began assisting a university colleague who operated a small winery. That budding interest blossomed into a passion, and he purchased a piece of land that later became Thomas Fogarty Winery and Vineyards, a 325-acre estate in the

Santa Cruz Mountains, about 25 minutes from Woodside. He planted his first vines in 1978 and established a commercial winery in 1981. Today, the enterprise produces some 20,000 cases a year, primarily Burgundian-style pinot noirs and chardonnays.

Some might scratch their heads at the idea of a physician winemaker, but Fogarty insists the two professions aren’t all that incongruous. “When it comes to both surgery and winemaking, there’s a lot of science and art combined together,” he explains. “The personalities of a surgeon and a winemaker really aren’t that different. Both are very exacting, always striving to do better.”

As he approaches his 80s, Fogarty is still striving, and shows no signs of slowing down. Ann Fyfe, president and CEO of the Fogarty Institute for Innovation, has known the surgeon since they overlapped at Stanford, where Fyfe served as vice president of marketing and strategy for Stanford Hospital. “My first impression of Dr.

Fogarty was that he wasn’t a typical academic or physician,” she recalls. “He was always thinking outside the box—a little rebellious, very patient oriented, a prankster who loved to play jokes on people, and a fabulous surgeon who always asked the question, ‘Is there a better way to do things?’”

The institute recently expanded into a 14,000-square-foot space at the old El Camino Hospital building, a move that will allow the organization to select a new group of innovators to join its current companies in residence. Fyfe says Fogarty is a frequent presence, stopping by to check up on the companies’ progress and serving as an invaluable mentor to the up-and-coming entrepreneurs. “To just watch his mind work is really amazing,” she enthuses. ♦

