

***El Camino's innovation center creating quite a medical buzz***

by Sara Solovitch - Silicon Valley / San Jose Business Journal - August 17, 2007

Whatever Dr. Thomas J. Fogarty puts his name on -- be it a Balloon Embolectomy Catheter or a Napa Valley Cabernet -- turns golden.

So when news slipped out that the inventor, one of Silicon Valley's most legendary entrepreneurs, was putting not only his name but his actual handprints on The Fogarty Institute for Innovation at El Camino Hospital, calls started coming in -- many of them from high-profile physicians wanting to get in on the ground floor.

"We've gotten more than a dozen calls from very prominent physician innovators all around the country interested in relocating their practice to El Camino," reports Jon Friedenber, interim CEO of the Fogarty Institute.

The institute is scheduled to open its doors in September, though at this point there is little to see. The hospital has set aside 4,500 square feet of space in the Melchor Pavilion for a wet lab, dry lab, offices and conference rooms.

If all goes according to plan, the first year's budget of about \$1 million will cover the salaries of an engineer, administrative help, rent and computers, all in support of "the most innovative-friendly environment humanly possible," says Friedenber.

And smack in the middle of it all, in typical hands-on fashion, stands the master inventor himself.

"This is not a situation where Dr. Fogarty is just putting his name on something and going fishing," Friedenber stresses. "Our goal is to educate the next generation of innovators. Without mentors and hands-on experience, you simply can't teach medical innovation."

The Institute will function somewhat like an incubator, a term Fogarty dislikes. But the need is something he feels passionately about:

"It is extremely difficult in the current environment to innovate -- particularly in a university setting," says Fogarty, a cardiovascular surgeon who over the years has collected surgical patents the way some people collect stamps. He has more than 100 to his name.

"Conflict of interest has become a huge issue," he continues. "There are so many rules and regulations, often self-imposed by people who don't know what they're doing. I think Stanford has more committee members within the hospital than it has patients."

Not that Stanford isn't working to upend that problem. In 2001, the university launched the Biodesign Innovation Program, a multidisciplinary effort between its business school and departments of medicine, mechanical engineering, and bioengineering, to train future innovators of medical devices.

Some of the university's most illustrious professors have also committed themselves to the incipient Institute -- among them, Dr. Thomas Krummel, chief of surgery and co-director of the biodesign program.

"If Dr. Fogarty will have me, I will be delighted to be there," Krummel says, laughing.

The idea for the institute was put into play when El Camino Hospital approached Fogarty several years ago. Fogarty says he was attracted, largely because he believes the best ideas come from busy clinicians working in community hospitals, doctors who identify a problem through their practice and design accordingly.

"El Camino is going to create an environment that is innovation-friendly, with proper oversight and knowledgeable people," he says. "A private institution has its total focus on the patient. In a university, the focus is on basic science, research, teaching -- and then the patient. The patient is last."

After numerous discussions, El Camino Hospital created a not-for-profit foundation as a way of separating itself from any foreseeable conflicts of interest.

"The physicians at the Institute are not employed at the hospital so there will be no requirement that clinical trials be done at El Camino," explains Friedenber. "But even if they do, El Camino

doesn't hold any intellectual property. If the trial goes well and the device becomes successful, the hospital doesn't realize any direct economic benefit."

What it hopes to get instead is plenty of prestige.

"We believe there will be physicians who will want to come and be part of this environment," Friedenberg says confidently. "Stanford has a unique and important role, and we don't expect to ever be a place to do transplants. But in terms of those physicians who want to focus their time on taking care of patients and, in addition, have ideas they want to pursue, the existence of the Fogarty Institute here will create an environment that is superior."

The institute signals a response to what Fogarty and other physician entrepreneurs describe as a stifling of innovation in academic medicine. In recent years, universities have witnessed an exodus of prominent innovators. Fogarty, for one, left Stanford six years ago.

The litany of complaints includes over-regulation and entrenched bureaucracy. For example, it can take a university medical center up to a year of committee meetings before approving a clinical trial that typically gets the go-ahead from a community hospital after a mere couple months.

Cost is a huge factor. According to Fogarty, clinical trials typically cost three to five times as much in a university setting as in a community hospital.

Not surprisingly, therefore, the beneficiary of that disparity has become the well-endowed community hospital. More and more, facilities like El Camino and Good Samaritan Hospital are the leading enrollers of clinical trials that once would have been the purview of academic medical centers.

In El Camino's cardiovascular unit, 15 clinical trials are currently underway -- compared to just two or three about 10 years ago.

"It has been a convenient little secret at El Camino Hospital for the last decade," says Dr. James Joye, a cardiologist. "More and more we see that our industry partners, in particular, are turning to the high quality, high volume community hospital."

Joye is one of several physician innovators at El Camino. In his case, he holds six patents in cryoplasty, a cooling therapy for difficult-to-treat blood vessel blockages. His Los Gatos company, CryoVascular Systems Inc., was sold to Boston Scientific in 2003.

"For someone like me, there is no greater situation than to have a mentor like Tom Fogarty, to be able to walk across the street on my lunch hour and interact with engineers and innovators, to be able to nurse an idea and put it into practice."

For all its implicit criticism of academia, The Fogarty Institute is structuring itself on an academic-like model, with teachers (virtually all of them medical innovators who have fled the ivory towers), students (known as Fogarty Fellows), even, possibly, groups of medical students who will pass through the program for several months at a time.

"We're going to try to do it in a very academic way, largely because the people involved all have close ties to Stanford and other schools," says Dr. Frederick St. Goar, an interventional cardiologist at El Camino. A founder of Evalve Inc., a Menlo Park company that designs devices for mitral valve repair, St. Goar is also associated with the Stanford Biodesign program.

Stanford, by all accounts, has been extremely supportive of the El Camino project. The two institutions share two other joint programs, including a cardiovascular surgery program and a neonatal program, both of which allow Stanford doctors to operate at El Camino.

Still, Dr. Christopher Zarins, a Stanford cardiovascular surgeon, suggests that several factors may give the little community hospital an edge over the great university when it comes to innovation. Not least of those: access to busy practitioners who practice on a daily basis with "ordinary" patients -- people who require simple hernia repairs instead of heart transplants.

"These are the only two places in the country that are actively doing this kind of thing," Krummel points out.

"And that's because the valley is such a sweet spot. There's more than enough room and more than enough need to train the next generation of people in this country and all over the world."