

CATCHING UP WITH DONALD FRANCIS**'We are here to save the world'****FORMER BIOTECH EXEC COMMITTED TO HIS NON-PROFIT TO STOP HIV**

By Steve Johnson
Mercury News

Donald Francis has spent a quarter century trying to help people with HIV, devoting most of those years to developing a vaccine against the deadly virus.

Trained as a pediatrician with an expertise in infectious diseases, Francis directed the World Health Organization's smallpox eradication efforts in the Sudan and in Northern India, before joining the U.S. Centers for Disease Control and Prevention in 1971. Among other things, he directed the CDC's AIDS laboratory and was the agency's California liaison on AIDS.

But the job proved frustrating. Francis became fed up with what he regarded as the federal government's foot-dragging on the disease. His battles with the Reagan administration over the matter eventually were chronicled in the book, "'And the Band Played On.'"

Francis joined Genentech to help work on an HIV vaccine in 1993, a year after he retired from the CDC. Two years later, South San Francisco-based Genentech spun off the vaccine effort into a new company, VaxGen of Brisbane, which Francis co-founded.

His frustrations continued, however.

In 2003, VaxGen announced the results of a major study showing the vaccine offered no significant benefit to the general population. The disappointing data prompted the company to switch its focus to other potential products, including an anthrax vaccine. But Francis, VaxGen's president, refused to give up on HIV.

In February 2004, he and two other senior VaxGen executives quit to set up Brisbane-based Global Solutions for Infectious Diseases, a non-profit devoted to making a vaccine for HIV and other diseases. In April of this year, the Bill and Melinda Gates Foundation awarded Global Solutions nearly \$8 million to pursue its work over the next three years.

Francis spoke with the Mercury News about his career and efforts to develop the vaccine. Here are edited excerpts from his remarks.

QWhat political problems did you face at CDC getting the federal government to address the HIV threat?

AIt was terribly frustrating, as you might imagine, with the Reagan administration and HIV. This was an extremely bad disease and the government was prevented from responding. The acting director of CDC asked me to design a prevention program for the United States, and I did that. It went up to Washington and was totally rejected. They thought it was a lot of money. It was like \$30 million or some silly amount. The quote I got from the Reagan administration was, "'Look pretty and do as little as you can.'"

QWhy did Genentech spin off its HIV vaccine program to VaxGen?

AGenentech has a dozen possible products that they can pursue and so what they do is look at the market times the probability of success. And a vaccine, even for HIV, which would be a reasonably good market, was a highly risky thing, whereas a cancer treatment is not as risky and has a huge market. So it's basically a business decision.

QHow disappointed were you when VaxGen's vaccine turned out to have little benefit and the company didn't continue developing it?

AYou can't be disappointed at science, because that's just the way it happens. But obviously you'd rather have success than failure. You have to make a decision that, in a small business, we can't do it, let's work on something else. And that was the point where the head financial officer, the head of research, myself, all said, "'Let's go out and do this.'" At that point we got in touch with folks like Gates. You really should never let a piece of knowledge that you can obtain for an AIDS vaccine languish, and the Gates Foundation recognized that and has funded us.

QHow important would it be to develop a beneficial HIV vaccine?

AIn my career I've seen the essential elimination of multiple diseases, the most impressive being smallpox. When you start seeing these diseases disappear, it's just wonderful. Now, can you imagine a time when there is no more HIV transmission? It just would be spectacular.

QAre you more confident now about your ability to make a successful HIV vaccine than you were at VaxGen?

ANo. I think I was more confident at VaxGen that it would follow the paradigm of other infectious diseases and be less variable. This is tough. Look at how few people are working on this. In almost all diseases you have a group that recovered and you look at them to see what their immune response was. You want to imitate that immune response. There is no disease like HIV, where 100 percent of the people -- or 99 percent -- progress. It's just an incredible virus.

QDo you have any family members or close friends with HIV?

ANot immediate family. But I came to California in 1985 and dozens of really close associates died, really good friends that we worked with over the years. I just stopped going to funerals after a while. It was just horrible.

QHave those death helped motivate you to develop a vaccine for HIV and other diseases at Global Solutions?

AI don't need any more motivation. When I see limping kids in India with polio, or smallpox cases -- anything that you should be able to prevent -- I don't need any motivation. As a pediatrician, I've seen it. It takes very little to say, ``God, can't we get rid of that disease?" AIDS is horrible. It's the slowness of it. It's one thing having a kid come in with a fever and die. It's another thing having a good friend of yours essentially just wither away, I mean just disappear, and their mind starts drifting. It's god awful.

QWith the grant from the Gates foundation, you plan to intensively analyze the data from the VaxGen vaccine study to determine why some people got infected and others didn't. What do you expect to accomplish by doing that?

AHopefully we'll have a map to help us design the next candidate vaccine. The road was pretty foggy when we finished the VaxGen study. Now, we should be able to clear that fog and see where that road is going and hopefully lead us to the goal that we want.

QYou have estimated it may take a dozen more years to develop a beneficial HIV vaccine at a cost of \$100 million to \$300 million. Where will you get the money to carry on your research after the Gates grant?

AWe are tapping any organization that we can, because I think you should not rely on any single source for these kind of important funds. We are soon to go to Seattle and talk to not only Gates but others up there.

QYou note that you and some others at Global Solutions didn't draw a salary during the organization's first two years. Having been president of a biotechnology company, how much of a change has it been for you to be involved with a non-profit?

AIf you're a board member at a company, as I was, you have to maximize the return for the investors of the company. You are not there to save the world. We are here to save the world. All of us have worked on big diseases and big problems around the world. You can't give up fighting this one. We're all fairly senior and want to do things that leave a mark.

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