

<b>FitzMall.com features:</b>		<i>Fitzgerald</i> AUTO MALLS FitzMall.com SINCE 1966	
<b>CarFind</b> Search new and used	<b>AutoMalls</b> Find products and services		
All vehicles have discounted, delivered, no haggle prices. Shop			

# Gazette.Net

Maryland Community Newspapers Online

 Now 53°
  Tue 66°/44°
  Wed 71°/52°

[Montgomery](#) | [Prince George's](#) | [Frederick](#) | [Carroll](#) | [Sports](#) | [Politics](#) | [Business](#) | [Entertainment](#) | [Spe](#)

Friday, Oct. 26, 2007

## New front launched in war on malaria

With \$29.3M from the Gates Foundation, Rockville company opens plant today  
by Steve Berberich | Staff Writer

[E-mail this article](#) \ [Print this article](#)

Five years ago, “everybody in the field of vaccines” thought using mosquitoes as factories to produce a malaria vaccine was just crazy, recalls Stephen L. Hoffman.

### More News

[Building on an American Indian theme](#)  
[New panel marks historic African-American landmarks](#)  
[Parents applaud new school system academy](#)  
[Middle school stages 'The Vampire's Bride'](#)  
[South Lake parents push for new middle school](#)

This afternoon, Sanaria Inc., led by CEO Hoffman, will officially open its new manufacturing plant in Rockville that does just that.

The plant was made possible largely by a \$29.3 million grant in December from the Bill & Melinda Gates Foundation, plus \$3.5 million in federal small-business grants captured in April for additional research. Co-hosting today's opening is Sanaria's partner, the PATH Malaria

Vaccine Initiative in Bethesda. The initiative is part of PATH, a nonprofit health initiative headquartered in Seattle whose name formerly was Program for Appropriate Technology in Health.

Although researchers in dozens of laboratories around the world are trying to develop a malaria vaccine, Sanaria's process is unique, Hoffman said. It is made of a suspension of the malaria-causing parasite that has been rendered harmless by a quick zap of radiation.

For 18 years, Hoffman, as director of the malaria vaccine program at the Naval Medical Research Center in Silver Spring, worked on making a malaria vaccine through DNA recombinant technology, he





**Have  
YOU  
been  
Spotted?**

**Find out.  
Click here.**

said. There is still no effective vaccine for the disease today.

Hoffman, a physician, said that following his Navy career and a short stop as a researcher at Celera Genomics Inc. in Rockville, he and his son Alexander, home between college and law school, sat down to talk about how to build a business around a single idea and an enormous need. Malaria kills more than 2 million people a year, according to the World Health Organization.

“When I left Celera in July 2002 and started Sanaria in my breakfast room, there were 3,000 children a day dying of malaria — one every 30 seconds,” Hoffman said. “Now, five years later, there are still 3,000 children dying a day of malaria. Our goal was to start a vaccine program to eliminate those deaths.”

Hoffman said the current vaccine project was the only viable approach. While in the Navy, he had experimented with such a vaccine and published results of its effectiveness on volunteers.

Sanaria began producing small lots of the vaccine at its initial location in east I year after several years of preparation.

For the past six months, the company has been building the new, bigger plant i Rockville.

Sanaria has added about a dozen employees. Next, it will use a few hundred lab workers to carefully e irradiated parasites from the salivary glands of mosquitoes. Hoffman hopes that each mosquito will pr three doses of the vaccine.

Hoffman expects the vaccine to be 90 percent effective in eradicating malaria. Having shown that the manufactured under best manufacturing practices, the partnership will now launch clinical trials to det effectiveness, dosage levels and the best way to administer it.

Hoffman’s wife, B. Kim Lee Sim, vice president for process development and manufacturing, led a te for four months to develop the methods and lots used in pre-clinical tests.

J. Adam Fenster/The Gazette  
Sanaria Inc., led by CEO Stephen L. Hoffm  
the basement insectary in its new research  
in Rockville.

**Employers**  
**Attract qualified LOCAL**



**The Gazette/The Star Cl**  
**301-670-7100 ■ class@ga**

#### FEATURED JOBS

**DISTRIBUTION SUPPORT SPECI**  
Daytime, flexible 24hr/wk Tuesday through

**Administrative Assistant R'ville**  
law firm seeks hard working entry level adn

**PRN Lab Technician**  
for busy multi-specialty physician office in F  
Fax More

**MEDICAL RECEPTIONIST Neede**  
for a busy, growing Pediatric practice in Ge  
More

[See All Featured Ads](#)

'He has continually overcome every obstacle'

Anthony Fauci, director of the National Institute of Allergic and Infectious Diseases of the National Institutes of Health, has high hopes for Hoffman and the vaccine.

"The NIH, my institute, over the past several years has given a number of grants to Steve to help him develop the fundamental concept of this new approach toward a malaria vaccine ... and he has continually overcome every obstacle toward this approach, technical and logistical obstacles," Fauci told The Gazette earlier this year.

"And then he needed a considerable amount of money to get the clinical trials going to make the product that you can inject it into people and also to actually do the clinical trials," Fauci said. "The Gates money when the time to get those trials started. He needed to get a plant started to make the product and use it to do the clinical trials."

The plant represents a major milestone in the effort to translate Sanaria's approach into a "safe, highly effective vaccine," said Christian Loucq, director of the PATH malaria vaccine program, in a statement.

Both Fauci and Loucq are scheduled to speak at today's opening ceremony, along with economist Jeff Christopher Van Hollen (D-Dist. 8) of Kensington; Regina Rabinovich, director of infectious diseases at the Gates Foundation; and Ghana's ambassador to the United States, Kwame Bawuah-Edusei, plus officials from Africa. Also expected to attend are U.S. Sen. Benjamin Cardin (D-Baltimore) and Montgomery Executive Isiah Leggett (D).

"Today's ceremony is to celebrate the hard work and long hours of his 40 employees and Sanaria's partnership in honor to work with these people," Hoffman said.

His colleagues in the vaccine field initially thought his idea was crazy because not enough vaccine could be produced, he said. "Now we have the vaccine in the bottle and the manufacturing plant up to standards."

From babies to soldiers

The company plans to file for a new investigational drug application for the vaccine to the U.S. Food and Drug Administration in August. Clinical trials will take several years and the goal is to get the vaccine to market in about five years.

Sanaria is targeting four main markets. Most in need are the 25 million African infants who are exposed to malaria. The second group is the millions of pregnant women and girls in Africa. Hoffman said they lose part of their lives to malaria when they become pregnant, leading to more miscarriages and lower-weight newborns.

The third group is the millions of travelers who visit regions where malaria is rampant and who would pay a significant price for the vaccine. These revenues will help subsidize lower prices for poorer people, Hoffman said.

The fourth market is the military.

Once the vaccine is in all four markets, “you would expect to double or triple the sales in undefined n the world,” Hoffman said.

Copyright 2007 Post-Newsweek Media, Inc./Gazette.Net  
Contact Us | About Us | Privacy Policy | FAQ | E-Letters | Place Classified ad |  
The Gazette: newsroom and business office | 1200 Quince Orchard Blvd. | Gaithersburg, MD 20878  
The Gazette: administration, advertising, classifieds | 9030 Comprint Court | Gaithersburg, MD 20877 | main  
classifieds: 301-670-2500