After leaving Satyam, I have a late dinner with Dr. Krishna M. Ella and learn about a new dimension of the Indian offshore story. Ella, a molecular biologist, grew up in India but did his university and graduate study at the University of Wisconsin-Madison and University of Hawaii-Honolulu. After graduation he worked for five years at the Medical University of South Carolina-Charleston, becoming known internationally as a leader in his field before returning to India. Ella is not exceptional in making this return. Many of the world's top biotech experts are Indians who have taken a similar path. Just as it has sought to capitalize on its people's software and IT skills, the Indian government has also promoted development of a biotech and pharmaceutical industry. India has already built the world's fourth largest pharmaceutical industry by making itself a major producer of generic drugs.

Nine years ago, Ella saw the opportunity to found what could become a major company and to do something for his native country in the process. With his own money and assistance from a group of investors, along with the national and local governments, he founded Bharat Biotech. Bharat's spanning new laboratories and production line are located in Genome valley, a half hour drive through the countryside outside of Hyderabad. Ella tells me a story much like what I heard in China. This modern drug development and production facility, which meets GMP (good medical practice) standards, was built at a cost of $4 million. In the United States it would have cost $25 million. Just as in China, labor and the required investment cost far less. As we take the tour, Ella proudly explains that one of the lab's major products is a hepatitis B vaccine produced using Bharat's proprietary technology that dispenses with the use of cesium chloride, thus making the vaccine affordable for developing countries. Bharat is the only company in the world that can make the vaccine in this manner.

In addition to Ella, I am accompanied by several of the company's key directors, all of whom trained and worked in the United States before coming back to India. The company is working on a typhoid vaccine and has an arrangement with Wyeth Laboratories of Mumbai to manufacture hepatitis vaccine that Wyeth then supplies to other Asian markets. Ella emphasizes that although the product is made and sold in Asia, because it is sold under the label of a U.S. company it must meet American FDA standards. It's as good as anything in the States.

Bharat is also collaborating with the Centers for Disease Control in Atlanta and the U.S. National Institutes of Health on development of a roto virus vaccine. The clinical trials have all been done in India, which, Ella explains, is ideal for such trials because of its diverse population and because it is far easier and cheaper to persuade people to participate in the trials here than in the developed world. He expects that in the future most clinical trials by the world's drug makers will be done in India.

After the tour, Ella tells me about his latest project over lunch. Bharat has received a grant from the William and Melinda Gates Foundation to develop a malaria vaccine. Because malaria is a tropical disease mainly afflicting the world's poorest people, most people in the developed world are only vaguely aware of it. The big global pharmaceutical companies have invested far less in fighting it than in developing drugs for male erectile dysfunction. But year in and year out, malaria is one of the world's biggest killers. Still, of all the world's pharmaceutical companies, why did the Gates Foundation choose Bharat to find a cure? Ella explains that
there were three reasons. Working on malaria in a tropical region made sense. The development costs in India are far lower than anywhere else, and Bharat has world-class capabilities.