

Gates's Point Man

Q&A with Tadataka Yamada, M.D.

Tadataka Yamada, M.D. ('71), has enjoyed an unusually expansive career as a physician-scientist, internist, and gastroenterologist,

serving with distinction in academia and the pharmaceutical industry. Born in Tokyo in 1945, he came to the U.S. at 15 to attend Phillips Academy in Andover, Mass., and later received a B.A. in history from Stanford University. After graduating from NYU School of Medicine, Dr. Yamada joined the University of Michigan Medical Center, where he eventually served as the Chairman of Internal Medicine and Physician in Chief. He left in 2000 to become Chairman of Research and Development at Glaxo-Smith-Kline Corp., a major pharmaceutical company, and a member of its board of directors. Last year he joined the Bill & Melinda Gates Foundation, the world's largest philanthropy. As President of its Global Health Program, he oversees a \$7.8 billion initiative dedicated to accelerating the development of medicines and vaccines to combat AIDS, tuberculosis, and malaria, and to the application of technologies to deliver better healthcare to the developing world. Earlier this year, the School honored Dr. Yamada with its Solomon A. Berson Medical Alumni Achievement Award in Clinical Science.

Q. Did growing up in Japan after World War II influence your decision to become a doctor?

A. Absolutely. I was born just before World War II ended. What most people don't realize is that in those days Japan was a Third World country. After the war, Japan was broke, had no food, no public systems or infrastructure to support health. Infant and maternal mortality were high, and among the leading causes of death were diarrhea, pneumonia, and malnutrition. My kids would never understand what it was like. But it also gives



me optimism because I believe countries can rise from the ashes and make the kind of progress that is needed to establish a healthy and equitable society.

Q. Do you come from a family of physicians?

A. My grandfather was a physician in Brooklyn. He came to the U.S. and went to Cornell Medical School. My mother married my father and went to Japan to live for the rest of her life. My grandfather passed away before I was born, but he was always a role model when I was growing up. I always wanted to go to medical school in New York City because my grandfather had practiced there.

Q. Was it difficult being at NYU?

A. It was. I was a history major at Stanford, and I didn't decide to go to medical school until the summer before my senior year in college. Then I had to take two years of college in one to finish all the premed requirements. I had only a rudimentary understanding of science when I went to NYU. All my classmates were well-versed in the sciences. I felt as though I was way behind. But I learned very quickly that

science is critical to being a good physician, so I put a lot of effort into science, learning as I went to medical school and beyond. Of course I spent a good part of my career as a bench scientist.

Q. You had a flourishing career in academic medicine. What prompted you to jump to industry?

A. In the late 1990s a headhunter sought me out to see if I would join the board of directors at SmithKline Beecham, and I thought it might be very interesting. After I had been on the board for two years, they asked me if I would join the company. As a physician, I had seen what it means to have medicines transform disease. Joining a pharmaceutical company and making medicines that could have a huge impact on human life was very appealing to me.

Q. You reported that you became interested in providing medicines to the developing world after the company had sued to keep the South African government from selling generic copies of its HIV medicines. Can you describe this episode?

A. It was right at the time of the merger (SmithKline merged with Glaxo Wellcome in 2000), and Glaxo had a large HIV franchise. When the lawsuit hit, it really affected me and many other people in the company. We asked ourselves, “What are we doing in a company that won’t make medicines available to the people who need them?” That really transformed many people, including me, and one of the things we did was convince the board that we should set up a research operation that focused on drugs for the diseases of the developing world.

Q. Was it the first time that you felt so strongly committed to global health?

A. It was the first time that what we did had meaning to people who couldn’t afford to pay for our medicines. Fortunately I had the support of the CEO and the board, and we were able to do this. It went very well and the net impact is that GlaxoSmithKline and its CEO, Jean-Pierre Garnier, started to think about what our role is in the world and how we can play an appropriate role and still have responsibility to our shareholders.

Q. How did you become involved with the Gates Foundation?

A. In our research unit for the diseases of the developing world we had collaborations with two NGOs (non-governmental organizations) funded by Gates. In November 2005 I went to visit the Gates Foundation in Seattle to make sure our programs were going OK and we were doing well. They asked whether I might consider working for the foundation. I didn’t think twice about it. It was an opportunity of a lifetime. They had me on the first word.

The impact that you can have on so many people who are needy is unbelievable. Consider that 11 million children under the age of five and 4 million under the age of one die every year. Those numbers are absolutely staggering.

Q. You oversee a program that has distributed some \$7.8 billion in grants. How does it feel to have such a potentially huge impact on global health?

A. It is obviously a daunting responsibility. Although we can’t do it alone, we can certainly lead in a lot of these fronts to make vaccines for HIV, malaria, and TB, and to make new medicines for these diseases. It is not easy and it is very risky. We are willing to take these risks, but we do have to succeed downstream.

Q. The Gates Foundation has grown substantially with the addition last year of Warren Buffett’s gift. Where do you think more funds should be directed?



1
OPPOSITE PAGE:
Dr. Yamada visits a women and children’s nutrition center in northwest India.

2
THIS PAGE (TOP):
Dr. Yamada at a clinic in Mahuwa, India, in the northeastern part of the country.

3
THIS PAGE (CENTER):
Members of the Bill & Melinda Gates Foundation’s Global Health team at a clinic in Mahuwa, India.

4
THIS PAGE (BOTTOM):
Dr. Yamada and Bill Gates in Mozambique.

A. We focus on three principal areas: infectious diseases, maternal-child reproductive health, and nutrition. I don’t think we will add to these areas, but we are going to expand the depth with which we pursue them. We need to invest more in the basic discoveries that lead to more potential products. On the other end, how do you deliver a product and ensure there is a demand for it? We need to think carefully about the entire process of manufacturing, country policy, financing, logistics, and marketing.

Q. You have been traveling in a lot of developing countries during the past year. What has surprised you the most?

A. One of the most surprising revelations is that we have to incorporate the private sector because that is where the vast majority of healthcare in the developing world is actually administered. In south Asia almost 80 percent of healthcare is delivered and

paid for in the private sector. In sub-Saharan Africa it is more like 50 to 60 percent.

Q. You have written that you have to be prepared for more experiments to fail than to succeed. Do you also apply this to global public health?

A. Yes. We have to take some risks, try different things, and be prepared to innovate, which means you will likely have many failures before you have success.

Q. The Gates Foundation is devoted to ensuring that all people have equal access to healthcare and medicines, a laudable goal. How long do you think it will take to reach this goal?

A. It depends on how effective our vaccines are and how long it takes us to get there. I anticipate that we will have a TB vaccine within the next five years, a malaria vaccine in the next five to 10 years, and an HIV vaccine in the next 15 to 20 years. I feel very optimistic. ●