

2012 Gold Medal Award Ceremony Remarks

Remarks by Dr. Peter Hotez, President, Sabin Vaccine Institute

Good evening, for almost two decades the Albert B. Sabin Gold Medal has been awarded to the world's leading scientists and vaccinologists. Past recipients have been honored for developing and testing vaccines that have helped to control eliminate, or in one case eradicate the world's most devastating infections and even cancer.

The Sabin Vaccine Institute was founded to honor and continue Dr. Sabin's personal mission to reduce poverty and human suffering through public health initiatives. Dr. Sabin had a particular passion for giving children access to preventative medicine to ensure the next generation will be healthy and prosperous.

Our Vaccine Advocacy and Education team, led by Dr. Ciro de Quadros, works with partners around the world to increase access and promote awareness of underutilized vaccines – both traditional and new—including meningococcal vaccines.

The Global Network for Neglected Tropical Diseases, led by Dr. Neeraj Mistry, works to raise the awareness, funding and political will needed to eliminate seven neglected tropical diseases. Our new END7 campaign has helped to increase awareness and support for NTD control and elimination which will lead to the treatment of tens of millions of people annually in the world's low- and middle-income countries

Finally, I am privileged to lead Sabin's Product Development Partnership (PDP), now based in Houston, which is spearheading the development of safe and cost-effective vaccines for diseases that almost exclusively impact the world's poorest citizens. Right now we are developing vaccines for hookworm (currently in phase I clinical trials), schistosomiasis and Chagas diseases. Through our product development partnership (PDP) we are working to ensure these vaccines will be affordable and accessible to those who need them most.

Among the discoveries recognized through our Gold Medal award are vaccines or vaccine programs for smallpox, measles, mumps, rubella, hepatitis, adenovirus, polio, haemophilus influenzae type B, rotavirus, rabies, malaria, group B meningococcal meningitis, cholera, and most recently last year, cervical cancer.

I would like to acknowledge the past Gold Medal winners in the room tonight by asking them to stand up. Here with us tonight we have Donald Henderson (1994 winner); Myron Levine (1998 winner); Phil Russell (1999 winner); Stanley Plotkin (2002 winner); Samuel Katz (2003 winner); and Albert Kapikian (2005 winner). Their combined efforts have literally saved more than 100 million lives in the 20th and 21st century!

I would also like to thank our sponsors for their role in making this event possible. We're grateful to the support of the Bill & Melinda Gates Foundation, Texas Children's Hospital, Sanofi Pasteur, Serum Institute of India, Pfizer, and MedImmune.

Tonight's Sabin Gold Medal recipient has special meaning for me personally however, for unlike most of the vaccines I just mentioned, I had the privilege of actually watching and following Dr. LaForce's international efforts to develop and distribute MenAfriVac, the vaccine intended to forever erase the term and concept of "the meningitis belt" in sub-Saharan Africa. From regular meetings

at the Gates Foundation and even more frequent encounters at PATH headquarters located close to the Sabin Vaccine Institute, I got to learn first-hand from Mark what worked and what didn't and watch him steadily and inexorably make progress towards his intended goal. It was the most amazing learning experience I could hope to have – simultaneously I have come to know Mark as a mentor and friend.

Through the unwavering support of the Bill & Melinda Gates Foundation in collaboration with the World Health Organization and the absolutely amazing Serum Institute of India, in 2011 the meningococcal A conjugate vaccine developed through the Meningitis Vaccine Project reached 3 new countries and more than 35 million people in Africa. MenAfriVac was then introduced in selected regions in Cameroon, Chad, and Nigeria (more than 21 million people vaccinated); while Mali and Niger conducted their last MenAfriVac campaign, immunizing more than 13 million individuals (from their website). Counting those vaccinated in 2010, almost 55 million people aged 1–29 years have received the new vaccine to date (also from their website). I am confident that through the heroic efforts of Dr. LaForce meningococcal A disease will be eliminated in Africa's meningitis belt.

It is my special pleasure now to introduce Dr. Regina Rabinovich, yet another leading light in infectious diseases and vaccinology.

Dr. Rabinovich is the Director of Global Health Infectious Diseases at the Bill & Melinda Gates Foundation. She oversees the development and implementation of strategies for the prevention, treatment, and control of diseases that include malaria, pneumonia, diarrhea, and neglected infectious diseases.

Dr. Rabinovich has also served in various positions at the U.S. National Institute of Allergy and Infectious Diseases (NIAID) and as director of the PATH Malaria Vaccine Initiative. She serves on the boards of several organizations including the NIAID Council and NIH Council of Councils; PATH Vaccine Solutions; and AERAS.

Welcome Dr. Rabinovich!

Remarks by Dr. Jean-Marie Okwo Bele, Director, WHO Department of Immunization, Vaccines and Biologicals

Ladies and Gentlemen,

It is truly a privilege to address this distinguished audience on this historical occasion. The Sabin Gold Medal Award to Marc acknowledges and honors his hard work over the four decades and fantastic achievements in global health, that culminated in the development and the roll-out of the revolutionary new Men A conjugated vaccine, that could end a century of meningitis epidemics in sub-Saharan Africa.

The WHO Director General, Dr Margaret Chan, views the development and use of this new vaccine as a triumph for public health on several levels. Most importantly, it gives us a ground-breaking new model for product innovation driven by public health needs, and not by market forces.

Marc earned his doctor of medicine degree from Seton Hall College of Medicine and Dentistry, in Jersey City in 1964, and completed his internal medicine and infectious disease training at Boston City Hospital. He is board-certified in internal medicine and infectious diseases and is a Fellow of the American College of Physicians and the Infectious Diseases Society of America. He has held research and academic positions at the University Of Colorado School Of Medicine and the University of Rochester School of Medicine and Dentistry.

Marc's public health career started in 1966 when he worked as an Epidemic Intelligence Service Officer in the Meningitis and Special Pathogen Units at the Centers for Disease Control and Prevention in Atlanta. This was when he discovered that, according to his words 'public health was a lot more interesting than what I had been taught in medical school'.

In 1975, he was involved with Smallpox Eradication Programme, working as smallpox epidemiologist for the WHO in Rangpur District of Bangladesh.

Many of you may have read the recently published supplement of the journal Vaccine, on smallpox eradication, 30 years after. In his article on the legacy of smallpox eradication, D.A. Henderson noted that the eradication programme resulted not only in new concepts in public health management and surveillance but also in the emergence of a new generation of young health workers who applied new approaches and who experienced the gratification of public health achievement. Marc was one of those young health workers...

In the late 70s, he joined Rafe Henderson and others at WHO in Geneva and extensively contributed in the early conceptualization, development and roll-out of the Expanded Programme on Immunization, which is the enduring legacy of smallpox eradication as Joe Breman would put it.

Among many contributions, Marc helped develop and field test polio lameness survey disease burden protocols which he published in 1980 as a co-author with Lichnevski, Keja and Henderson in the Bulletin of the WHO.

I am referring to this particular protocol as this was the first community-based survey I ever executed soon after I joined the national EPI in Kinshasa back in the early 1980s. Using the protocol, as we were expanding EPI services and establishing sentinel surveillance systems for EPI, we assessed the magnitude of the burden of polio to be around 7/1000 young children in the capital city of Zaire.

Through the 1980s and 1990s, Marc continued to support global health efforts, through many short-term assignments while working at the Genesee Hospital at Rochester, and as Director of the USAID-funded BASICS project and the Partnership for child health care. (BASICS stands for Basic Support for institutionalizing Child Survival).

During this period, he worked in all phases of the evolving universal childhood immunization (UCI) effort in Indonesia, India, The Gambia, Senegal, and Zaire; he drafted the first WHO/EPI/HIV documents; He completed neonatal tetanus and polio disease burden studies and evaluated national immunization programs in Egypt, Jordan, Morocco, Indonesia and Saudi Arabia.

This is the period when I first met Marc and worked with him. He came to Kinshasa to review progress of the Zaire “CCCD - combating childhood communicable diseases” project, a project that dealt with EPI and control of diarrhoeal diseases and malaria.

Marc has motivated so many colleagues who like me had the privilege of working with him during his numerous field visits. Clearly his fluency in French language, his passion for childhood survival programmes, his knowledge of the people’s culture and his inspiring presence were all real assets for his successful involvement with the programmes in Central and West Africa.

From 2001 to early this year, as the Director of the WHO-PATH Meningitis Vaccine Project funded by the Bill & Melinda Gates Foundation, Marc directed the development of the overall strategy and implemented policies of the program in consultation with the Project Management Committee, acting as primary liaison between the Project and the relevant partner agencies, including WHO in Geneva and WHO regional office for Africa, Centers for Disease Control and Prevention (CDC), other global health agencies, field sites, and in addition he coordinated the partnership with the Serum Institute of India, Ltd.

Marc inspired and lead a great team at PATH and WHO in ways that the new Men A vaccine was developed, from start to finish, in less than a decade, in record time.

And throughout these years, Marc managed to have a solid trustworthy team. Here are a few words that Marc’s colleagues would use to describe him: *Marc is approachable, humane, a pathfinder, a man with a steadfast dedication that did not waver over a decade, a person with a*

rare understanding of the critical nature of partnerships. He has the rare wisdom to assemble teams seeing beyond individuals and institutions the potential to achieve a valuable human goal.

The new Men A conjugate vaccine is available at one of the most exciting time and the time of great opportunities with vaccines and immunization globally, ... the time when the number of licensed vaccines currently recommended for use by WHO is nearly 4 times what it was when EPI was established in 1974.

But this vaccine is special, truly revolutionary. It was demanded by the African health leaders after the 1996-97 huge meningitis outbreak, and in September 2008, African Ministers from the meningitis-belt countries signed the Yaounde Declaration whereby they committed to fast-track introduction of the new vaccine, strengthen surveillance and improve information sharing to enhance the region's response to epidemic meningitis.

In December 2010, the launch was greeted with fanfare and red carpet in Burkina Faso, as the Head of State came personally with his wife to preside over the launch event.

But the 10-year development period was not an easy ride. Like for any vaccine development project, several steps and hurdles had to be overcome. And during the difficult time, Marc's team recalled that he would say:

"Whoever we are, whatever we do, whatever challenges we face, we must remember who our client is. Our client is the African child. He, she comes first. Always."

In Congo, we say : "He who looks for honey, must have the courage to face the bees".

Marc - Your family support was important: Nancy your wife clearly understood why you had to be away from home most of the time, visiting Geneva, Brazzaville, the countries of the Sahel region, India, Seattle and many other places. I know you missed your family greatly, including your daughters and grandchildren... but c'était pour la bonne cause – as one would put it in French. Marc will remember that in September 2010 he and I made had a very productive series of talks with the press in London and Paris prior to the launch of the vaccine. The main question from journalists was : which vaccine is next in follow up of this model ?

I had similar queries during a lecture on EPI that I gave this past Friday to master's degree students at University of Paris VII, in France. Also, a student from Burkina Faso asked the timing when an affordable conjugate vaccine against the other serogroups will be available? I promised I will ask this question to you, Marc.

Marc did not simply work to make a new vaccine available. He spent relentless efforts for policy decisions and for ensuring the readiness of countries for vaccine introduction and widespread use. This included a dedicated session at the WHO Strategic Advisory Group of Experts on Immunization that examined the investment case for Men A vaccine introduction prepared for GAVI financing. Earlier in the project, there were also major WHO meetings to develop recommendations regarding

meningococcal conjugate vaccines and several discussions in Africa with the Programme Advisory Group, with the programme managers of the meningitis-belt countries and with other health officials.

Following regulatory approval, then came “la consecration” – the ultimate approval of the new vaccine, by the targeted populations themselves. They expressed this approval through the long queues at immunization sites as we rarely observed in a region where multiple vaccination campaigns have been organized. The high turnout of people is clearly a sign that meningitis is very much feared by everyone ...

Last year at the African Regional Conference on Immunization, nearly 200 professionals, both Africans and their partners from around the world, including the WHO regional director publicly recognized and thanked you –through a standing ovation- for your extraordinary achievement with the New Men A vaccine. This work is seen as a positive response to the solicitation of the African health leadership following the disastrous epidemic of 1996-97.

“When a needle falls into a deep well, many people will look into the well, but few will be ready to go down after it.” (Guinea proverb)

Marc, you are one of the few that went down and came back up with the needle...

...It is my privilege to thank you on behalf of the global immunization community and of the millions of individuals whose lives you have touched and will continue to be touched.