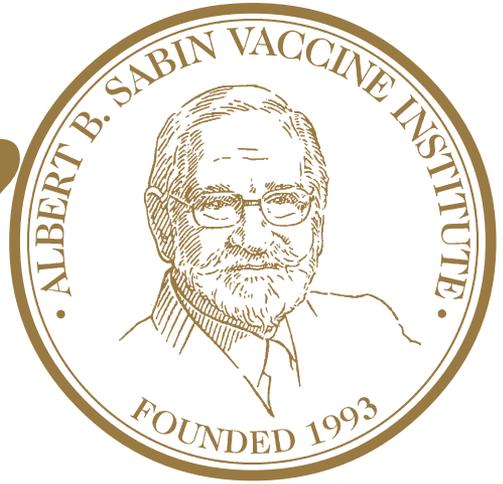


2006

Albert B. Sabin
Gold Medal



Address Delivered by
Award Recipient

William H. Foege, MD, MPH

Tribute by Freeman Hrabowski, III

May 9, 2006
Baltimore, Maryland

INTRODUCTION

by *H.R. Shepherd, DSc*
Chairman, The Albert B. Sabin Vaccine Institute

The Albert B. Sabin Gold Medal was first cast and awarded in 1994, and remains the Sabin Vaccine Institute's foremost scientific prize. It pays tribute to dedication and extraordinary accomplishment in the fields of vaccinology and epidemiology. The Sabin Gold Medal Advisory Committee, chaired by Maj. Gen. Philip K. Russell, MD (USA Ret.), each year has made an impressive choice; this year's award recipient is no exception.

William H. Foege's passion for global public health is evident in the extraordinary impact of his work, first with smallpox eradication efforts, later with the Task Force for Child Survival, and continuing to this day. Dr. Sabin often said that a scientist who is a human being cannot rest while knowledge that might reduce human suffering rests on the shelf. Dr. Foege's record represents the humanity of science; he innovatively deployed vaccines to their maximum effectiveness to reduce the burden of infectious diseases on the world's children, families and communities.

Vaccines have achieved some of the greatest and most humanitarian outcomes for children, adolescents, and adults around the globe. This benefit should never be taken for granted. The Sabin Gold Medal aims to draw attention to the research that brings vaccines from the theoretical to the practical for our world.

On behalf of the Board of Trustees of the Sabin Vaccine Institute, I commend the Sabin Gold Medal Selection Committee's choice of Dr. Foege for the 2006 award. With them, I congratulate Dr. Foege.

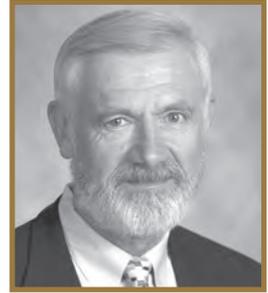
The following pages include the excellent tribute to Dr. Foege by his colleague Freeman Hrabowski, along with Dr. Foege's inspiring reflections on this occasion. For those who were able to be with us for this event, we hope this publication evokes the admiration and poignancy of the award ceremony. We hope all will enjoy the content for its lessons and inspiration, born from Dr. Foege's experience in the important field of global public health.



H.R. Shepherd, DSc

WILLIAM H. FOEGE, MD
2006 ALBERT B. SABIN GOLD MEDAL RECIPIENT

William H. Foege is an epidemiologist who worked in the successful campaign to eradicate smallpox in the 1970s. He has championed many issues, but his special interests are child survival and development, injury prevention, population, preventive medicine, and public health leadership, particularly in the developing world. A strong proponent of disease eradication and control, he has taken an active role in the eradication of Guinea worm, polio and measles, and the elimination of river blindness. By writing and lecturing extensively, Dr. Foege has succeeded in broadening public awareness of these issues and bringing them to the forefront of domestic and international health policies.



Dr. Foege attended Pacific Lutheran University, received his medical degree from the University of Washington, and his Master's in Public Health from Harvard University. He became chief of the CDC Smallpox Eradication Program, and was appointed director of the U.S. Centers for Disease Control in 1977. In 1984, Dr. Foege and several colleagues formed the Task Force for Child Survival, a working group for the World Health Organization, UNICEF, The World Bank, the United Nations Development Program, and the Rockefeller Foundation. Its success in accelerating childhood immunization led to an expansion of its mandate in 1991 to include other issues which diminish the quality of life for children.

Dr. Foege joined the Carter Center in 1986 as executive director, fellow for Health Policy and executive director of Global 2000. In 1992, he resigned as executive director of the Carter Center, but continued his role as a fellow and as executive director of the Task Force for Child Survival and Development. In January 1997, he joined the faculty of Emory University, where he is Presidential Distinguished Professor of International Health at the Rollins School of Public Health. In September 1999, Dr. Foege became a senior medical advisor for the Bill & Melinda Gates Foundation. In October 1999, Dr. Foege resigned as executive director of the Task Force for Child Survival and Development. Dr. Foege retired from both Emory University and the Gates Foundation in December of 2001, but he remains active in both organizations as Emeritus Presidential Distinguished Professor of International Health and as a Gates Fellow.

TRIBUTE TO
WILLIAM H. FOEGE, MD

*by Freeman A. Hrabowski, III
President, University of Maryland at Baltimore County*

I had the privilege of meeting Bill Foege several years ago when he and I joined the Board of the newly created Marguerite Casey Foundation in Seattle. The Foundation was established as a grant-making entity for supporting low-income families and children. During our discussions, I witnessed Bill's exceptional problem-solving skill, his novel approach to challenging conventional thinking, his deep commitment to children globally, and his enormous experience working across cultures, academic disciplines, and the public and private sectors.

It was inspiring to learn about his phenomenal career spanning four decades—from medical school at the University of Washington and graduate study in public health at Harvard to leading the CDC's Smallpox Eradication Program and directing the CDC under two Presidents; from helping to eradicate Guinea worm, polio, measles, and river blindness to his role in creating the Task Force for Child Survival; from serving as Executive Director of the Carter Center and distinguished professor of international health at Emory University to serving as senior medical advisor for the Bill & Melinda Gates Foundation, and much more. Bill personifies the word *luminary*.

Sixty years ago, another luminary, Albert Einstein, wrote that,

A large part of our attitude toward things is conditioned by opinions and emotions which we unconsciously absorb as children from our environment. In other words, it is tradition – besides inherited aptitudes and qualities—which makes us what we are. We but rarely reflect how relatively small, compared with the powerful influence of tradition, is the influence of our conscious thought upon our conduct and convictions.¹

Well, in Bill's case, however, "the influence of [his] conscious thought upon [his] conduct and convictions" has set him apart from virtually the rest of us. Einstein captures what Bill has been doing for more than 40 years—pushing himself, and us, to think deliberately about our values and our actions, pricking the consciousness—and conscience—of the developed world, and challenging us to think about children and the poor and to act on their behalf when they, themselves, cannot.

Anyone who knows Bill knows that he has a fascinating, often humorous story for every occasion. (As a southerner, I particularly appreciate this, especially his stories about his grandson.) He also is constantly writing—using his computer everywhere he goes, recording what he does, and writing about his experiences. In this regard, he is like Leonardo da Vinci, who always had a notebook with him, and for whom the process of constantly writing things down was part of his being. Through Bill's eyes, he is constantly chronicling his reactions to the world, and how the world reacts to him.

I am reminded of the words of Layton McCurdy, Emeritus Dean of the Medical University of South Carolina, who, during an address to students there a few years ago, told his story of growing up on a farm in the South with African American sharecrop families. He talked about how he realized only much later in life, after earning college and medical degrees at Chapel Hill, that he never had any black classmates and that it had never occurred to him that there was anything wrong with that situation. Reflecting on his experience, he said,

*"The only thing worse than being blind is having eyes that do not see. I remember the days, months, and years that I walked past [signs that read] "White/Colored" and I did not see...The lesson I learned is to challenge myself and you. What do we walk past every day now and not see?"*²

1 Einstein, Albert, "The Negro Question," *Pageant*, January, 1946, in *Einstein on Race and Racism*, Fred Jerome & Rodger Taylor, Rutgers University Press, New Brunswick, 2005, p. 141.

2 McCurdy, Layton, Address to Medical University of South Carolina students, 2001.

There is very little that Bill Foege walks past and does not see. He has used his eyes to look into the face of suffering over and over, and to live among those who have suffered—touching them in so many ways on so many levels. Throughout his lifetime of reflection and action, he has learned and taught lessons that continue to inspire us. And for that inspiration, and your vision, all of us—most especially the children of the world—are better.

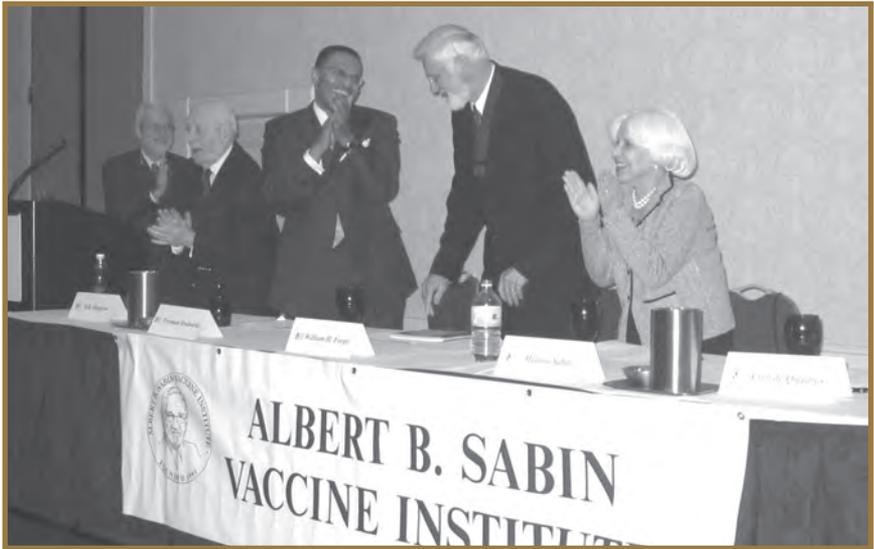
Freeman A. Hrabowski, III, has served as president of the University of Maryland, Baltimore County since May, 1992. His research and publications focus on science and math education, with special emphasis on minority participation and performance.



He serves as a consultant to the National Science Foundation, the National Institutes of Health, and universities and school systems nationally. He has co-authored two books, *Beating the Odds* and *Overcoming the Odds* (Oxford University Press), focusing on parenting and high-achieving African American males and females in science. Both books are used by universities, school systems, and community groups around the country.

A child-leader in the Civil Rights Movement, Dr. Hrabowski was prominently featured in Spike Lee's 1997 documentary, *Four Little Girls*, on the racially motivated bombing in 1963 of Birmingham's Sixteenth Street Baptist Church.

Born in 1950 in Birmingham, Alabama, Dr. Hrabowski graduated at 19 from Hampton Institute with highest honors in mathematics. At the University of Illinois at Urbana-Champaign, he received his MA (mathematics) and PhD (higher education administration/statistics) at age 24.



Rising to acknowledge the chorus of applause, William H. Foege, recipient of the 2006 Sabin Gold Medal, is surrounded by, from left, Ciro de Quadros, president, *a.i.*, Sabin Vaccine Institute; H.R. Shepherd, chairman, Sabin Vaccine Institute; Freeman A. Hrabowski, III, University of Maryland, Baltimore County; and, at right, Heloisa Sabin, widow of Albert B. Sabin, the late vaccinologist in whose name the medal is given.



A group of Sabin Gold Medalists are among those pictured with Dr. Foege, from left, Robert M. Chanock, MD (1995), Sabin Vaccine Institute Chairman H.R. Shepherd, Philip K. Russell, MD (1999), Ciro A. de Quadros, MD, MPH (2000), Albert Z. Kapikian, MD (2005), Freeman A. Hrabowski, PhD, William H. Foege, MD (2006), William S. Jordan, Jr., MD (2004), Myron M. Levine, MD, DTPH (1998), Donald A. Henderson, MD, MPH (1995), and Samuel L. Katz, MD (2003).

REMARKS UPON ACCEPTANCE OF THE
2006 ALBERT B. SABIN GOLD MEDAL

by WILLIAM H. FOEGE, MD

First, let me express my gratitude for this award. When most people think of Albert Sabin they immediately think polio. For me the first thought is the advice he gave me many years ago, before it became common knowledge, “Don’t shake hands when you have a cold.” It is an honor to be associated with his name and with the names of those who have preceded me to this lectern.

Second, let me also express my gratitude to Freeman Hrabowski for his introduction. Dr. Hrabowski is one of the premier educators of our day, mathematician by background, who finds gifted young people and puts them into an environment where they can thrive. The result is some of the greatest scientists of our future. At a time when the U.S. is losing its lead in biological research, his work is extraordinarily important. I regard Freeman Hrabowski as the Albert Sabin of scientific education. A visionary.

Third, allow me to share my discomfort with getting awards. A month after getting another award, my eight-year-old grandson suddenly asked me “Are you still embarrassed about getting that award?” I didn’t realize my discomfort was that obvious but the answer was, “yes,” and his question causes me to think about the dynamics. I have long known that it takes a team to do anything ,and I have long been embarrassed that I often get the credit for what a team has done.

But the Sabin Gold Medal allows me to consider what it is that actually happens when we have success in public health and global health.

Our capacity, not just for global health, but for all parts of society, continues to expand of course as the result of individuals and teams. The individuals push the envelope in ways that never have to be repeated. An example I find useful is that we don’t each have to learn how to build a car from scratch. If we did, there would be very few cars and indeed it is said that at this point in history there is no one person who knows how to build a car.

The first thought of a steering wheel, transmission, muffler or windshield wiper or even cup holder by a single person, makes that concept available to everyone. It never again has to be thought of as an original idea. Instead it becomes the standard and then someone else thinks about a fuel pump so you don't have to have the gas tank higher than the engine. And the car takes shape not over days or even months but over years. I grew up with a passion for old cars, have two Model A's, and while we think of the changes as being with each model year, I have a book that shows the changes in Model A's month by month for the entire four years that they were made. With a car one sees the ingredients of Darwinian evolution. We have passed the first century of continuing improvements. And we find that it takes more than a village to raise a car. It literally takes the whole world with idea after idea layered on to what is already known.

But along the way there were a few geniuses expanding the concepts in ways that pulled everyone to a higher level. Henry Ford was in that category.

That allowed large numbers to be part of a team using the ideas, producing the cars...and then a far greater number able to benefit and use the cars.

As we think about the role of genius in expanding horizons for everyone you realize that is what Dr. Sabin did for infectious diseases and for global health.

He saw a future that others didn't see, but then he also saw the road to that future. There is a quote that "originality is actually undetected plagiarism." We have plenty of examples where that may be true. We credit Sir Isaac Newton with the phrase, "If I see further it is because I stand on the shoulders of the giants who preceded me," only to find that it proved his point because the phrase was plagiarized from Robert Burton in the book *Anatomy of Melancholy*. Burton in turn referenced his use of the phrase to Lucan 1600 years earlier. We credit Lord Acton with the phrase, "Power corrupts and absolute power corrupts absolutely," only to find that phrase was plagiarizing from Isocrates 2000 years earlier. [Paul Warneke improved the phrase in our lifetime by saying that "It may

be true that power corrupts and absolute power corrupts absolutely but the most corrupting of all is the fear of loss of power.”]

I am saying all of this to make clear first that I plagiarize from everyone but also to make a different point. Sometimes originality is for real. Kurt Vonnegut in his book, *A Man Without a Country*, raises the question whether people of genius are actually plagiarizing...but from the future. I like that because isn't that what Dr. Sabin was doing? He saw a future without polio and then saw the tool needed as well as a mechanism for making that possible. He saw a future that others didn't see and then made it possible by actually changing the future to his specifications.

But even Albert Sabin needed a team to make the vaccine. Interdependence is the rule. Gandhi said we should seek interdependence with the same zeal used in seeking self-reliance. A more recent source is Bartlett Giamatti who said, “The paradox into which one gradually grows is that independence is achieved by consenting to interdependence.”

So developing oral polio vaccine was built on hundreds of ideas that had come before, but it is a rare person who is able to join the reality of the past to the vision of what might be possible in the future. When that idea was formed, the concept did not need to be rediscovered. And many could then engage in helping to make it happen.

Because Sabin plagiarized the future, he stretched the envelope for two other developments. One, his work provided the vocations for many of us in actually delivering the idea. Vaccinators, health educators, public health administrators, an army of people able to live out our dreams and ideals with purpose...improving the health of people individually and in the aggregate. Sabin changed the possibilities of the future and we were all foot soldiers in making that future what he had envisioned. We are all part of a movement that I see as “Scientists without borders,” or “Health workers without borders,” indeed “People without borders.”

Second, the envelope was stretched for countless people who have no idea whatsoever that without that genius and all the rest of us swept up in the wake, they would be spending their lives paralyzed.

We all learned the phrase, if not the concept, in biology, “Ontogeny recapitulates phylogeny.” At that time we thought of it in pure biological and evolutionary ways. The development of each individual mirrors the entire history of the species and is the most recent product of that long evolutionary road. But now, as Freeman mentioned, we see a much larger perspective. The development of an individual incorporates all of the biological changes experienced by the species throughout history, but also all of the social changes. The combined impact of every genius that has altered society as well as the impact of all of us in this room who have helped deliver the tools of that genius. What a system.

But it is all processional. The best is yet to come. Just as the finest painting is yet to be made, and the greatest poem is yet to be sung, so is the greatest science still before us. The experience, knowledge, skills and enthusiasm gathered from the past whet our appetite to do more. And more there is to do, with emerging infections, AIDS, drug resistant tuberculosis, an epidemic of tobacco related illnesses and the fundamental problem of the growing gap between the haves and the have-nots—between the rich and the poor.

What are the challenges? First, as we view the problems of the future, it is safe to predict that our science will remain ahead of everything else. Ahead of our ethics, our law, our religion, our sociology, our politics, our understanding. The question is how to get ethics as good as our science? How do we get people as good as our science? How do we produce scientists with a moral positioning device?

A second challenge is how to keep social justice the engine of public health but also how do we encourage social justice in politics? After years of encouraging public health people to focus on providing politicians with the information they need for decision making, I changed my approach to encourage public health workers to enter politics. Last year I had an email from Les Roberts saying he first heard me suggest that some years ago during a talk in Baltimore. He recalls saying to his wife on the way home, “He wasn’t talking to us.” His email went on to say that he had concluded I was talking to him and he asked if I would speak at a

fund raiser for him. I have now talked at my first political rally and I found myself wondering if this is the next chapter for public health.

April 1955 was important for the first polio vaccine but it was even more important because of a political decision. With the announcement of the first polio vaccine, Mrs. Oveta Hobby, Secretary of HEW announced that she would seek an appropriation to buy polio vaccine for poor children. A senator then announced that no child should have to declare poverty to be protected and he said he would seek an appropriation for all children. That day vaccines went from personal protective devices to a social good...a tool for social justice.

We should now follow Freeman's example and encourage young people to go into science and to go into public health. The tools have improved so much that we can tell them with certainty that this is a field of promise and opportunity.

A friend in Atlanta told me that her cousin had decided to be a Baptist minister. He spoke to his grandfather about the decision and the grandfather asked him if he was prepared to speak out each Sunday against sin? He replied that he was. The grandfather continued and asked if he was prepared to talk each Sunday to sinners. Yes he was. The grandfather said, "Then you have great job security."

The next quarter century will be the time when the biggest health problems of the developing world will yield. Two vaccines are now coming out against carcinoma of the cervix. Rotavirus vaccine is now being licensed. The most important anti-malarial drug has now been synthesized and this will reduce treatment costs from dollars to dimes. Guinea worm is about to be eliminated. Onchocerciasis is losing its sting. Micronutrients are improving the IQ of the world. Maize is now being grown with a full complement of essential amino acids. Students can go into public health with great job security because of the tools. And they can do it with great purpose.

But our ultimate challenge in public health and global health is how we use these tools now spilling forth at an increasing rate. Many in this group have heard me talk about my search to measure civilization. Every criterion listed by historians, including wisdom,

knowledge, technology, control, power and even happiness fall by the way when subjected to scrutiny. But the measure of how people treat each other holds up as the best measure. We know it as the Golden Rule, first stated, to the best of my knowledge, by Confucius. Certainly he was the most succinct when a student asked if he could tell them in a word how best to live and he said, “Is not reciprocity that word?”

So this is our ultimate challenge. To be judged by how those of us interested in public health and global health treat others, especially those we will never know.

Let me close by saying thanks for the way you treated me tonight. Thank You.



Among those extending congratulations to Sabin Gold Medal recipient William Foege, are Heloisa Sabin, widow of Dr. Albert B. Sabin (top, left); Dr. Robert Chanock, 1995 recipient (top, right); and Patty Stonesifer, Bill & Melinda Gates Foundation chief executive officer.

THE ALBERT B. SABIN GOLD MEDAL

The Albert B. Sabin Gold Medal is awarded annually by the Albert B. Sabin Vaccine Institute to recognize extraordinary accomplishments of those who make vaccine discoveries or employ vaccines to combat vaccine-preventable diseases.

PAST HONOREES

1994~Donald A. Henderson, MD, MPH · 1995~Robert M. Chanock, MD
1996~Joseph L. Melnick, PhD (*d. 2001*) · 1997~Maurice R. Hilleman, PhD, DSc (*d. 2005*)



1994



1995



1996



1997

1998~Myron M. Levine, MD, DTPH · 1998~Allen C. Steere, MD
1999~Maj. Gen. Philip K. Russell, MD (USA Ret.) · 2000~Ciro A. de Quadros, MD, MPH
2001~John B. Robbins, MD



1998



1998



1999



2000



2001

2002~Stanley A. Plotkin, MD · 2003~Samuel L. Katz, MD
2004~William S. Jordan, Jr., MD · 2005~Albert Z. Kapikian, MD



2002



2003



2004



2005



ALBERT B. SABIN VACCINE INSTITUTE

The twofold mission of the Albert B. Sabin Vaccine Institute (SVI) is to realize the enormous potential of vaccines to control and to eradicate disease by developing new vaccines and better delivery systems, and to promote increased use of currently available vaccines. The vision of the SVI is to save lives by stimulating development of new vaccines and increasing immunization rates globally. The Institute promotes cutting-edge vaccine research and innovations, identifies new research opportunities, advocates sound public policy toward vaccines and immunization, and educates the public and media about the benefits of vaccines. Founded in 1993, SVI builds bridges between leaders in science, academia, industry, and government to create solutions to worldwide health threats. In pursuing the legacy of renowned vaccinologist and statesman Dr. Albert B. Sabin, the Institute facilitates the exchange of ideas for solutions to emerging and ancient diseases, from hookworm to cancer. By helping to unlock the vast potential of vaccines, SVI is working to ensure that the diseases that threaten the world today will be only history lessons for future generations.

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that helped to make this year's event possible.