Tales from the Hot Seat – "When science matters"

I thank you for the invitation to participate in this first Euro-Atlantic Conference dealing with Science and Technology. It is most timely. Societal security has a new and different meaning than it did 20 years ago, even 10 years ago. And the new swine influenza pandemic is an emphatic reminder. It traversed the world with blinding speed – well before the best of our vaccine producers could create needed vaccines. Had the far more lethal H5N1 bird influenza acquired a comparable ability to spread, we would today be dealing with a global crisis such as we have never before witnessed. Societal security today is more fragile than it has ever been. But it is everyone's problem and transnational cooperation in the development and application of counter-measures is needed as never before.

During my 50 years in public health, I have found myself surprisingly often on a "hot seat" as we faced problems caused by polio, influenza, smallpox, anthrax, and food-borne outbreaks of every imaginable sort.

For me September 16, 2001 began some of my most anxious days -- and weeks. It was a Sunday afternoon, only 5 days after the airplanes struck the World Trade Towers. I was then head of a Johns Hopkins Center that was struggling to persuade a complacent country that biological weapons had to be taken seriously. The telephone rang. It was a call from the Secretary of Health and Human Services. The Bush administration had been in office for less than a year. I had

never met the Secretary. He said: "I need you to attend a meeting at 7:00". I asked whether that was Monday morning or Monday night. He said tonight.

I met with the Secretary and a small staff until nearly midnight. The concern -- intelligence intercepts indicated that there would be a second attack and that it would be biological—probably smallpox or anthrax. The question was "what can we do". The following morning I called the Centers for Disease Control which was the steward of smallpox vaccine that had been stored for the past 20 years. How quickly could they ship this vaccine? Later that day, they informed that only 90,000 doses of vaccine were then suitable for use. Five weeks later, the first of the anthrax cases was reported, followed shortly by 21 more. The country was ill-prepared to deal with the problem; laboratory competence was at a premium-- our medical and public health staffs were still in the early stages of simply learning about such as smallpox and anthrax. There was no question but that the nation was highly vulnerable.

The Secretary established a new office called the "Office of Public Health Preparedness". He insisted that I direct it. Two months later, the office received an emergency appropriation of 3,000 million dollars. It was the beginning of nearly three years of seven-day-weeks as we tried to shape both a research and operational program – constantly struggling to formulate a response to deal with the next attack– and we considered such an event probable. Much had to be done – and done quickly.

Science and technology were ~~even more critical than they had been during smallpox eradication.~~

It is notable that 2009 marks the 30th anniversary of the declaration ~~by a WHO international commission~~ that smallpox eradication had been achieved. ~~One of the 25 signatories to the declaration was Dr. Holger Lundbeck, a steadfast supporter and contributor to the program.~~

The challenge had been to eliminate smallpox world-wide in 10 years—a disease which over the past three millennia had been the most serious pestilence known to man. To succeed, it required the participation of every country and this was achieved, even during some of the darkest days of the cold war. In all, health staff from some 73 countries served in the field.

It was not a program, as some ~~believed~~, whose execution was a simple matter of buying enough vaccine and sending an army of vaccinators into the field. Indeed, strategy, tactics, and tools for implementation changed steadily as science and technology continually brought new insights and new tools.

This June, I published a book which portrays the challenges and realities in candid detail. ~~I am happy to say that already~~ [illegible] from this challenge.