

Dear Dr Plotkin, Dear Stanley

It is a great honor to be your "marraine". It is easy to explain why you deserve the Dr Honoris causa : you are the perfect ambassador of vaccinology, thanks to your major contributions as a medical doctor, a scientific researcher, Director of Pasteur Mérieux and a humanist ..

Last week, several cases of monkeypox were detected in Belgium. That reminds us of the early success of vaccination, i.e. the development in 1796, of a vaccine against the smallpox. This disease has caused over 300 million deaths in the 20th century and was eradicated in 1980.

1. Your contribution to vaccinology

- Polio was a common childhood disease that paralyzed some children. In 1959, together with Hilary Koprowski , you tested the efficacy, safety of live attenuated poliovirus vaccine in infants and studied the factors influencing a successful vaccination .
- In 1963, an epidemic of rubella broke out in Europe and spread to the United States, causing birth defects in thousands of infants. You developed the rubella vaccine by creating a weakened strain of the rubella virus. This vaccine is now used worldwide
- You remained involved in vaccine research, particularly for CMV, varicella, rabies and rotavirus.

You have published 867 scientific reports in a 70 years span.

Your most recent article, in press in Immunological Review, is entitled "Correlates of Protection against SARS CoV-2 Infection and Covid 19 Disease".

- *Antibodies against epitopes in S1 of SARS-2 coronavirus give the most accurate correlate of protection against infection. The role of cellular responses include CD8+ T cells that control viral replication. More information is needed regarding mucosal responses.*

2. Your contribution as a transmitter of knowledge

In addition to your career as Professor at the University of Pennsylvania, you published a standard textbook on vaccinology. It is a 1720 page tome that offers a complete understanding of each disease, and the latest knowledge of vaccines The seventh edition was published in 2017. It has been described by Bill Gates as "an indispensable guide to the enhancement of the well-being in our world".

Well-being in our world is certainly your major concern and brings us to

3. Your contribution as humanist

During your entire career, you tried to find practical solutions to human health problems.

You published articles with challenging titles, which are think pieces on human health problems.

- In 2009, “Sang froid in a time of trouble : is a vaccine against HIV possible”? You review the experience of the past: the uncomplicated example of the rubella vaccine and the misadventure that happened with the first licensed rotavirus vaccine, that caused intestinal invagination. The choice of the vector was a key issue. You underlined the complexity of correlates of immunity and you conclude: “Let us not give up, the goal is worth it”.
- In 2021, you published a message to the policy makers entitled: “Polio eradication vaccine investment”. An adequate supply of inactivated polio vaccine is now needed from multiple suppliers around the world to support polio eradication.
- In 2022, you publish an article with Pierre Van Damme on the immunization policy development in 6 European countries, including Belgium. You highlight a diverse range of challenges to achieve effective measles control and hopefully elimination.

After the Ebola crisis, in 2015, you proposed to establish a global vaccine development fund to carry vaccines from their conception to development and licensure. Your call was heard and the CEPI (Coalition for Epidemic Preparedness and Innovation) was launched. This is a scientific, medical and political breakthrough.

Dear Stanley

You spent your life in vaccine development. The World Health Organization noted that the vaccination spares 2-3 million lives every year. By developing vaccines, by following their efficacy, safety for years, by advising policy makers, you were clearly a central link in the chain.

Mille mercis et félicitations!