

Laudatory speech for Prof. Dr. Peter Piot

by Prof. Dr. Stefan Kaufmann

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[Address]

This year's recipient of the Robert Koch Medal in Gold does not in fact require any introduction.

- We were reminded that he was one of the scientists who discovered the pathogen of a terrible epidemic by the Ebola crisis of 2014/2015
- It is also thanks to him that while AIDS has not been conquered, it can be treated
- It is also not least because of his work that it is possible to treat AIDS at a reasonable price in those countries with low financial resources. We are certainly well aware of his achievements.

And yet, in my view, Professor Peter Piot deserves an introduction, despite his fame. I also want

to introduce him

- Because he is not one of those people who brag about their success

- Because he does not question the fact that it is necessary to attempt to find solutions even so a challenge as vast as AIDS
- Because for him, it is a matter of course to give warning in good time about trouble spots for epidemic outbreaks.

For Peter Piot, all this is the natural approach, and it is precisely for this reason that he should hear how highly we regard his scientific contributions in the field of epidemic development and the course of epidemics, and how impressed we are with the manner in which he has driven forward the fight against epidemics.

Peter Piot was born in Leuven, Belgium, and studied medicine at the University of Ghent. On completion of his doctoral research in medicine in 1974, he began work relating to his PhD at the Institute for Tropical Medicine in Antwerp, specialising in microbiology. In 1976, something very exciting happened which was to prove a changing point in Peter Piot's life. In a blood sample taken from a severely ill Belgian nun from Zaire, Africa (now the Democratic Republic of Congo), evidence was found of an unknown new pathogen. It emerged that she was not an isolated case, even though her fate was a key event in Peter Piot's life. A new epidemic had come to light. Today, we know that this was Ebola; at that time, the pathogen was still unknown. Peter Piot was one of the team which identified and characterised the Ebola virus. He was a member

of the research group which travelled to Yambuku, Zaire, to take a closer look at the outbreak of the epidemic on site, and which christened it “Ebola” after the river which flowed close by. The team not only managed to uncover the aetiology and epidemiology of this highly infectious, usually fatal disease, but was also able to provide life-saving information. By isolating those who had the disease and quarantining those who had contact with them, they managed to successfully restrain the first Ebola epidemic, which had claimed the lives of around 300 people, within three months.

Ladies and gentlemen, Ebola has very recently caught up with us again, and on a more threatening scale than ever before. To date, during the last Ebola epidemic in West Africa in 2014/2015, almost 30,000 people have become infected and almost 12,000 have died.

Let us return to Peter Piot, who then returned to his doctoral thesis in the laboratory. He worked – among others under Stan Falkow (winner of the Robert Koch award in 2000) – on the molecular characterisation of the resistance plasmids of the gonorrhoea pathogen *Neisseria gonorrhoeae*. In his doctoral thesis, he defined *Gardnerella vaginalis* as being an independent pathogen of vaginal infections. He completed his doctoral thesis in 1980 at the University of Antwerp.

However, he then had the urge to return to the African continent. Peter Piot worked on several projects relating to the epidemiology of new infectious diseases in Africa: in Burundi, on the Ivory Coast, in Kenya, Tanzania and Zaire. It was during his time as Co-Principal Investigator of the SIDA project in Kinshasa/Zaire that his achievements really stood out. “SIDA” stands for “Syndrome de l’ImmunoDéficiency Acquisée” – as you can already guess, what today has generally become known as AIDS, or Acquired Immune Deficiency Syndrome. In fact, this was the first major international project on AIDS in Africa, which made a crucial contribution to our understanding of the epidemiology, aetiology and symptoms of what was at that time a new epidemic.

In the early 1980s, AIDS was primarily regarded in the USA as being a disease suffered by homosexuals and drug addicts. Peter Piot and his team demonstrated that the reality was different:

- The importance of heterosexual transmission of the pathogen – the Human Immune Deficiency Virus, or HIV – was explained
- The significance of HIV transmission from mothers to

their newborn babies was also proven. At the same time, the astonishing heterogeneity of HIV, particularly in West and Central Africa, was proven by the work of Peter Piot and his colleagues.

Naturally, AIDS is a viral infection, and the development of anti-retroviral drugs has made a key contribution towards its being restrained. On the other hand, social factors also play a very important role in AIDS. The words of Nelson Mandela, the first freely elected president of South Africa, make this particularly clear:

“AIDS is no longer just a disease, it is a human rights issue.”

Yes, ladies and gentlemen, Peter Piot is one of the few scientists who not only combine epidemiological and clinical work at the bedside and in the bush with science-based laboratory work on the bench (and this is in itself difficult enough to achieve). He is also a highly respected expert in the field of politics and society on issues relating to AIDS and other threatening epidemics such as tuberculosis and Ebola. In 1991, he was elected President of the International AIDS Society, and in 1992 was named Assistant Director of the HIV/AIDS Global Programme at the World Health Organisation. From this, the Joint United Nations Programme on HIV/AIDS, known as UNAIDS, emerged. Too many different organisations within the United Nations were involved in tackling AIDS. Bringing together the 10 most important organisations to form UNAIDS therefore also meant pooling resources, enabling UNAIDS to make a powerful impact. On 12 December 1994, Peter Piot was named by the then General Secretary of the United Nations, Kofi Anan, as Executive Director of UNAIDS. Peter Piot's position was further strengthened when he was simultaneously named Assistant Secretary General of the United Nations.

Indeed, under Peter Piot's leadership, UNAIDS became the driving international force in the fight to combat AIDS. With an annual budget of 250 million US Dollars, and more than 1,000 staff in over 60 countries, Peter Piot tirelessly drove the battle against AIDS forward. Thanks to his leadership, billions of euros could be mobilised to fight AIDS. After all, Peter Piot had the foresight to recognise the global threat presented by AIDS, and to convince others how great the need was to act.

It would take too long to list in detail the achievements and successes of UNAIDS under the leadership of Peter Piot. I wish to limit myself to just a few in this laudatory speech: • UNAIDS

created the key global funding structures • UNAIDS established HIV prevention and therapy programmes in countries with insufficient financial opportunities • UNAIDS made a decisive contribution towards enabling AIDS to be treated at a reasonable price where the epidemic is at its worst. In 2008, Peter Piot's term in office came to an end and he left UNAIDS, which is now headed by his successor and colleague, Michel Sidibé.

Soon afterwards, in 2009, Peter Piot became Director of the Institute for Global Health at Imperial College, London, and in 2010 became Director of the highly respected London School of Hygiene and Tropical Medicine.

Peter Piot is a member of numerous academies, of which I would like to list the most important here:

- The Institute of Medicine of the National Academy of Sciences of the United States • The Belgian Royal Academy of Medicine • The French National Academy of Medicine • The Royal College of Physicians of London • The Academy of Medical Sciences, Great Britain.

Just as numerous are the awards and accolades which Peter Piot has received for his achievements as a scientist, but also as an outstanding personality in society. • He has received an honorary doctorate from seven universities. • He has been presented with the Nelson Mandela Award for Health and Human Rights (2001) • The Frank Calderon Prize in Public Health (2003) • The Hideyo Noguchi Africa Prize for Medical Research (2013), and • The Prince Mahidol Award for Public Health (2014). • He was already awarded the title "Baron" by King Albert II of Belgium in 1995.

The Medal in Gold, with which we honour Peter Piot today, is named after Robert Koch, who investigated the aetiology of another great epidemic, tuberculosis, over 120 years ago, and who fought against it. In his Nobel Prize acceptance speech in 1905, Koch did not emphasise his scientific achievement as the discoverer of the tuberculosis pathogen to such a great degree. As the founder of medical microbiology, it was a matter of course to Robert Koch that tuberculosis was an infectious disease, an epidemic, which must be combated with medical preventive and therapeutic measures. To a far greater extent, he laid particular emphasis on fighting tuberculosis using hygiene and epidemiology in order to improve living conditions. Robert Koch realised that improving social living conditions and establishing a functioning healthcare system

were just as important as medical intervention measures, in other words, improved diagnostic procedures, medication and vaccines.

This realisation applies today just as much as it did over 100 years ago, and Peter Piot has taken precisely the same approach as Robert Koch: his research led to the identification and characterisation of the Ebola virus, and to the restraint of the first Ebola epidemic. His untiring work in the fields of science, politics and society initiated the containment of the AIDS pandemic, which while it has not been overcome entirely, can today be treated successfully.

Dear Peter,

It is my great honour and pleasure to convey to you my congratulations on behalf of all of us for the Robert Koch Medal in Gold 2015.