

Françoise Barré-Sinoussi presents the latest AIDS research results at the BBVA Foundation

- **Françoise Barré-Sinoussi, director of the Retroviral Infection Regulation Unit of the Pasteur Institute in Paris (France) and Nobel Prize winner in Medicine for her co-discovery of HIV, participated in the “Nutrition and Health” series at the BBVA Foundation headquarters in Bilbao. This series is being organized together with the CICbioGUNE (Cooperative Bioscience Research Centre), the Biophysics Unit of the UPV/CSIC and the British Council.**
- **Barré-Sinoussi talked about HIV/AIDS**



Nobel Prize winner Françoise Barré-Sinoussi.

In 2008 the Nobel Prize in Medicine was awarded to the French researchers Françoise Barré-Sinoussi and Luc Montagnier, who discovered HIV – the cause of Acquired Immunodeficiency Syndrome (AIDS), and to the German Harald zur Hausen, who discovered the human papillomavirus or HPV (the cause of cervical cancer).

HIV (an acronym for human immunodeficiency virus) is the infectious agent behind acquired immune deficiency syndrome (AIDS). The human immunodeficiency virus infects the immune system cells, altering or cancelling out their functioning. The infection leads to the progressive deterioration of the immune system, with the consequent “immunodeficiency”.

According to the WHO, some 60 million people have been infected by the virus since 1981 (the year the first HIV/AIDS case was detected), and close to 25 million have died. Today the illness is most widely spread in Sub-Saharan Africa. Heterosexual transmission is the most common, with young women being the most vulnerable.

Once the AIDS virus was recognized, along with the antibodies produced by the immune system to combat it, it was possible to identify and diagnose the illness with blood samples. Cloning the virus also made it possible to identify its specific proteins. This led to the development of antiviral medicines. Access to these medicines has made it possible, among other things, to keep children from being infected by their mothers at birth.

Nevertheless, according to UNAIDS data, less than one in five people around the world who are at risk of HIV infection, have access to basic preventative services. As of mid-2006, only 24% of those in need of anti-HIV treatment had access to that treatment.

As soon as it became apparent that the HIV virus was the cause of the illness, the scientific community was hopeful that an effective vaccine would be quickly developed. But it has turned out to be quite complicated. The HIV is able to easily transform itself, partly because the virus invariably kills those cells in the immune system that are critical for stimulating the immune reactions that normally protect them. This explains why there is still no definitive cure.

SPEAKER PROFILE

Professor Françoise Barré-Sinoussi has spent much of her life devoted to the struggle against AIDS. Barré-Sinoussi joined the Pasteur Institute in the 70's. Her research was quickly focused on a certain virus group – retroviruses – which led her to co-discover the AIDS virus in 1983. That discovery provided the international scientific community with the decisive diagnostic tests needed for controlling the illness.

Barré-Sinoussi currently directs the Pasteur Institute's Retrovirus Infections Regulation Unit, which works on the innate immune impact of the host in order to control HIV/AIDS, as well as on the transmission of the virus from mother to child. She has participated in over 250 international conferences, and is co-author of more than 200 scientific publications. Barré-Sinoussi has worked hard to promote the integration of HIV/AIDS actions in countries with limited resources, through the Pasteur Institute International Network in Paris.