

## Françoise Barré-Sinoussi (1947)

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**60 million people affected, more than 22 million dead people, a continent –Africa- on the verge of collapse. Although AIDS has been the most frightening epidemic of the XXth century, the disease is no longer an imminent death sentence thanks to the work of scientist. Especially that of Professor Françoise Barré-Sinoussi, Medicine Nobel Prize laureate together with Professor Luc Montaigner in 2008 (1), for the identification and isolation of the human immunodeficiency virus, HIV, causing the illness.**

Born in Paris in 1947, she became interested in nature during her holidays in Auvergne while at school she obtained the best marks in sciences. She took an undergraduate degree in Sciences at the University of Paris because it was shorter and less expensive than a degree in Medicine, her initial choice. She started doing unpaid work at the laboratory of Professor Jean-Claude Chermann, at the Institut Pasteur at Paris, who finally supervised her thesis devoted to the study of the relationship between retroviruses and cancers. After finishing it in 1974, she spent a sabbatical year at the National Institute of Health in Bethesda, USA, and then came back to the Institut Pasteur. When at the end of 1982 some patients were diagnosed with a contagious strange illness which was not affected by antibiotics or any other known treatment, she was in charge of the research to find out if the infectious agent was a virus.

It is difficult to realize now how formidable this task was. In fact the appearance of such an illness was a shock in the first world. Nothing similar has been found before, because it destroyed the immunologic system that is why it was called Acquired Immunodeficiency syndrome, AIDS. For this reason the body was attacked and killed by pathogens that in normal conditions would be harmless. It was called the “pink plague”, because it attacked mainly

homosexuals. Panic spread as well as homophobic and puritan feelings. Hollywood actors headed a movement to remove the stigma of the illness, but the works carried out by scientist proved to be more efficient. A few months after having started her research, in May 1983, Françoise and her coworkers published the first work (2) identifying the agent responsible for the illness, later to be called VIH. It was one of the quickest answers in the history of medicine to identify the origin and provide treatment for a new disease. After the discovery of Prof. Barré-Sinoussi, major advances in laboratories all around the world brought drugs development and as a result the once lethal illness was transformed into a chronic one. Moreover, the faith in the power of science was recovered by mankind.

Although the success was great she did not stop working because the VIH virus had not been fully defeated. On one hand as head of the Retrovirus unit from the Pasteur Institute in Paris, (3) she keeps investigating to obtain a full recovery of the AIDS patients and an efficient vaccine to prevent it. On the other hand, as a person with a commitment to help people sick with AIDS, she pays regular visits to the sub-Saharan African countries, where most part of the 33 millions of affected people live, to devise strategies to fight the illness. She even answered the Pope when at the beginning of a visit to Africa in 2009 he dismissed the importance of using condoms to prevent AIDS recommending abstinence instead, by addressing him a strong open letter published in Le Monde (4).

Bright scientist, endless worker, fighter to improve the health of the poorest, without fear to criticize the highest authorities... On top of all that Françoise Barré-Sinoussi has a witty sense of humor (5) which renders her irresistible.

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### References

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2. Barré-Sinoussi F, and col. «Isolation of a T-lymphotropic retrovirus from a patient at risk for acquired immune deficiency syndrome (AIDS).», Science, vol. 4599, no 220, 20 Mayo 1983, p. 868-71
- 3.<http://www.pasteur.fr/ip/easysite/pasteur/en/research/scientific-departments/virology/regulation-of-retroviral-infections/regulation-of-retroviral-infections>
- 4.[http://www.lemonde.fr/idees/article/2009/03/24/lettre-ouverte-a-benoit-xvi\\_1171956\\_3232.html](http://www.lemonde.fr/idees/article/2009/03/24/lettre-ouverte-a-benoit-xvi_1171956_3232.html)
- 5.[http://www.youtube.com/watch?v=Kz-\\_daSSI4](http://www.youtube.com/watch?v=Kz-_daSSI4)