

## INFECTIOUS DISEASE

# Chronicles of a killer virus

Just over 30 years after HIV/AIDS was first recognized, three accounts of its ravages intrigue **Robin Weiss**.

As a frightening pandemic associated with sex, blood and death, AIDS was bound to evoke a rich mythology. Nicoli Natrass's *The AIDS Conspiracy* deals with those myths and how scientific arguments counteract them. Jacques Pépin's *The Origins of AIDS* looks back at the emergence of HIV in the era before the syndrome was recognized, and Victoria Harden's *AIDS at 30* covers the period after its identification in 1981.

*The AIDS Conspiracy* is essential reading for anyone who is curious about why some people will not accept scientific facts about the nature, origin and lethality of HIV. As an HIV researcher, I used to divide people's strange beliefs about AIDS into myths of denial, and of blame and conspiracy. But Natrass, who directs the AIDS and Society Research Unit at the University of Cape Town in South Africa, explains how HIV denialism has also become a conspiratorial attack on science and medicine — one that aims to convince people that antiretroviral therapy is more harmful than the 'blameless' virus.

Even when HIV is accepted as the cause of AIDS, Africa is blamed for its origin. Yet new diseases can arise anywhere: BSE or 'mad cow disease' in the United Kingdom, SARS in China and the 2009 H1N1 influenza pandemic in Mexico. Some AIDS creation myths continue to have an allure — for example, that HIV came out of oral polio vaccines, or that the virus is a man-made germ-warfare agent that was deliberately released in Africa by the United States.

Natrass identifies four types of HIV denier: the dissident scientist who lends credibility; the 'cultpreneur' who peddles quack therapies; the living icon or

## The AIDS Conspiracy: Science Fights Back

NICOLI NATRASS

Columbia University Press: 2012. 240 pp.  
\$34.50, £24

## The Origins of AIDS

JACQUES PÉPIN

Cambridge University Press: 2011. 310 pp.  
£45, \$28.99

## AIDS at 30: A History

VICTORIA A. HARDEN

Potomac Books: 2012. 304 pp. \$29.95

long-term survivor; and the praise-singer or journalist who sows doubt about HIV causing AIDS. The dissidents are a tiny group, yet their campaign against antiretroviral therapy in South Africa has been estimated as leading to more than 300,000 preventable AIDS-related deaths. Science can respond through mechanisms such as the Durban Declaration on the link between HIV and AIDS, which was signed by more than 5,000 scientists and physicians (*Nature* **406**, 15–16, 2000). Natrass also points out that social-media activists have often been more effective at tackling HIV denialism than official bodies.

In the superb *The Origins of AIDS*, Pépin — a Canadian epidemiologist who has worked across Africa — delves into the early phases of HIV emergence. After the ancestor of the pandemic HIV-1 group M passed from a chimpanzee to a human in southeast Cameroon about 100 years ago, a few infected people travelled down the River Congo. AIDS became a community disease in Léopoldville (now Kinshasa), the capital of the Belgian Congo depicted in Joseph Conrad's 1903 novella *Heart of Darkness*. HIV began to thrive in its new host, Pépin shows, for several reasons.

There was a surge in medical injections using non-sterile syringes in mid-twentieth-century Africa, giving the transmission of HIV (and hepatitis viruses) a

crucial helping hand — a theory previously postulated by US epidemiologist Ernest Drucker. No Congolese physicians were trained under colonial rule, and when Belgium abandoned the Congo in 1960, few colonial or missionary doctors remained. Pépin describes a society in turbulent transition, with 'free women' and migrants swelling the capital. HIV became a mainly sexually transmitted infection. After the unsuccessful war of secession in Katanga in southeast Congo, Haitians among the United Nations troops brought HIV to the West. Homosexual men went to Haiti for sex, and Luckner Cambronne, leader of the country's Tonton Macoutes paramilitary force, sold more than 6,000 litres of blood plasma a month to the United States.

One question that Pépin skirts is why HIV prevalence in Kinshasa since 1980 remained relatively stable and low while it exploded elsewhere in Africa, spreading widely in southern Africa only in the 1990s. That mystery drives home the point that where a virus first enters the human population isn't necessarily where

it blooms; roots are not shoots. Another puzzle is why HIV-1 group M has been so successful compared with the other cross-species infections of HIV-1 groups N, O and P from apes, and of HIV-2 from monkeys. Pépin rightly argues that, apart from social factors promoting HIV spread, inherent properties of the virus must determine its fitness to become pandemic. He also provides the best analysis I have read of the declining HIV-2 epidemic in West Africa.

*AIDS at 30* begins where Pépin leaves off, with the appearance of AIDS in the United States. Harden, the retired doyenne of medical history at the US National Institutes of Health, draws extensively on that agency's archives for her narrative of the scientific advances in understanding HIV/AIDS, its treatment and prevention. She is particularly strong on the challenges of formulating US public-health policies for AIDS.

With 34 million people living with HIV, besides the 30 million it has already killed, seeking to understand the myths and the history of AIDS is surely important — although not as pressing as developing a safe and efficacious HIV vaccine. ■

**Robin A. Weiss** is professor of viral oncology in the Division of Infection & Immunity, University College London, UK. e-mail: r.weiss@ucl.ac.uk

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