

news and views

monomer polymerization¹⁰, and a true ribozyme polymerase would have evolved (Fig. 1*d*). Of course, just as the 'march to progress' is an engaging but undoubtedly factually incorrect view of evolution, it is quite possible that our theoretical succession of catalysts is similarly tainted. For example, it is unclear where the predicted increase in molecular complexity took place, on the surface of a clay¹¹ or ensconced within a self-replicating vesicle¹², nor is it obvious what catalytic adjuncts were developed in parallel with replicability. Nonetheless, while it is unlikely that the polymerase selected by

Johnston *et al.*¹ is similar in sequence to whatever primordial ribozyme polymerase may have first 'stood upright,' it is nonetheless a close enough look-alike to provide us with a glimpse of more distant origins.

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history

Twenty years ago

In the summer of 1981, Prince Charles married Lady Diana Spencer, Sandra Day O'Connor became the first woman on the United States Supreme Court, and Mark David Chapman pleaded guilty to killing John Lennon. At that time, the Morbidity and Mortality Weekly Report (MMWR) published in an article, the first paragraph of which is reproduced here (see box).

And so began what was at first referred to as "the gay plague" and later became known as AIDS.

Before the report was published, the MMWR editorial staff sent this submission to experts in parasitic and sexually transmitted diseases at the Centers for Disease Control. The following editorial note that accompanied the published report suggested the possibility that "a cellular-immune dysfunction related to a common exposure that predisposes individuals to opportunistic infections such as pneumocystosis and candidiasis." The edi-

torial note also made the point that, "The fact that these patients were all homosexuals suggests an association between some aspect of homosexual lifestyle or disease acquired through sexual contact." Given that this was published on June 5, 1981, the editorial note was remarkably prescient.

Now, twenty years later almost 22 million people have died of the disease and over 36 million people are living with HIV. Dr. Peter Piot, the head of the Joint United Nations Programme on HIV/AIDS, said

on the 20th anniversary of the first official report of AIDS that, "This is now, without a doubt, the largest epidemic in human history, and we are certainly not at the end of it." Who could have possibly foreseen the magnitude of the disease based on such a modest five patient case study. And who would have imagined that many of the HIV inhibitors used to treat AIDS today are the direct result of — and one of the most successful examples of — structure-based drug design. *Boyana Konforti*

1981 June 5,30:250–2

Pneumocystis Pneumonia — Los Angeles

In the period October 1980-May 1981, 5 young men, all active homosexuals, were treated for biopsy-confirmed *Pneumocystis carinii* pneumonia at 3 different hospitals in Los Angeles, California. Two of the patients died. All 5 patients had laboratory-confirmed previous or current cytomegalovirus (CMV) infection and candidal mucosal infection. Case reports of these patients follow.