prepared themselves to die were suddenly faced with a new lease on life. The death toll that year dropped immediately from 50,000 to 20,000 deaths. Even though it was very hard to adhere to, HAART paved the way for companies like Gilead to design a drug that was both effective and easy to comply with.

This became possible after the first Gilead tests with monkeys had proven 100% successful in 1995. The company gained stature once cidofovir was approved in 1996 and introduced to the market under the brand Vistide. The success of the company reflected itself in Michael Riordan’s ability to raise close to $500 million after several more rounds of public offerings. With John Martin on board, Riordan felt the company was now in safe hands and proposed he be named the CEO of Gilead. The time had come for Riordan to pursue other dreams. By the time he left, he had hired 250 employees.

Gilead ramped up its antiretroviral profile and prepared for a spectacular entry on the market of Viread in 2001. It was the first one-a-day pill to treat HIV infections. At its core, Viread was based on the acyclic nucleoside phosphonates or acyclic nucleotides that were invented in Prague, analyzed in Leuven and developed in Foster City. Tenofovir and its prodrug TDF (Tenofovir Disoproxyl Fumarate) was the product of Tony Holý’s genius, the perspicacity embedded in Erik De Clercq’s group, and the driving force of John Martin in motivating his team to develop the compound.

As its next step, Gilead purchased Triangle Pharmaceuticals in 2003 and introduced Emtriva (FTC), followed by another miracle pill, Truvada which combined TDF and FTC in 2004 and Atripla which combined three drugs (TDF/FTC/EFV standing for Efavirenz) into a single pill in 2006. Tenofovir would remain the cornerstone of all other anti-HIV pills made by Gilead. Even the second generation anti-HIV pills introduced in 2017, based on the prodrug Tenofovir Alafenamide Fumarate, the so-called TAF generation developed by William (Bill) Lee and Thomas Cihlar, contains tenofovir albeit at a much lower dosage. To this day, Gilead’s drugs remain the gold standard for HIV treatment not only in the developing world but as of recent also in the developing world. In 2012, the FDA recognized Truvada as the ideal pill for prevention. If enough people had access to it, Truvada could put an end to the epidemic.
Epilogue
Of scientists and crusaders

What one needs in life are the pessimism of intelligence and the optimism of will.
— André de Staercke, former Belgian ambassador to NATO

Twenty years into the AIDS epidemic, little had been accomplished to thwart the disease in developing countries. With the exception of some minor milestones in the field of bloodscreening and educational efforts, HIV continued to spread like wildfire around the world. The situation was particularly disastrous in sub-Saharan Africa.

The tepid international commitment in the 1980’s and 90’s was partly due to the fact that only very ineffective drugs were available. The problems were compounded by the absence of political will, denial by leaders in the most affected countries and lack of funding. In the United Nations family very few multilateral organisations had been monitoring the crisis. Six of them finally decided to coordinate their actions in the field of HIV/AIDS and created UN-AIDS in 1995. Belgian scientist, Peter Piot, became the head of the coordinating agency, he raised awareness slowly but surely.¹

The tipping point occurred in January 2000 when U.S. ambassador to the UN, Richard Holbrooke, persuaded his colleagues to convene a meeting of the Security Council concentrating on Africa. The meeting woke people up. The epidemic in Africa, ground zero of HIV/AIDS constituted a new type of security challenge. More than 11 million AIDS orphans could easily become weaponized as child soldiers. The diminishing demographics and drastic reduction in life expectancies were upsetting the political and economic stability of almost all affected countries.

The formal reason for putting “AIDS in Africa” on the agenda of the Security Council was the danger that peacekeeping operations posed in spreading the virus.² The Council adopted a resolution in that regard, but the meeting had a much larger outcome. From then on, HIV/AIDS would
be dealt with at the highest level of government. It spawned a series of regional initiatives, most notably the summit on AIDS in Africa convened by the Organization of the African Union. As Peter Piot recounts in his book:

One head of state after the other broke the silence on AIDS in their country, collectively the continent acknowledged at last, that it had an AIDS problem.

Sensing the support from the international community, the heads of state were now committed to tackling the epidemic. Shortly before the summit, UNAIDS and WHO had negotiated major price reductions for antiretrovirals with the pharmaceutical industry, and the first Indian generic antiretrovirals arrived on the African market.3

Funding, however, was still a major problem. The UN called for the establishment of a special fund for AIDS in 2001, which became the “Global Fund to fight AIDS, Tuberculosis and Malaria” a year later. Donors, led by the United States felt the UN was too slow and inefficient to manage an emergency fund and insisted the Global Fund would be established as a public-private partnership. The United States became its first supporter with a contribution of $200 million and pledged that it would match every other contribution.

The Global Fund has become a major game changer and so has the groundbreaking President’s Emergency Plan for AIDS Relief (PEPFAR). President George Bush Jr. took everybody by surprise in his State of the Union address on January 29, 2003:

Today on the continent of Africa nearly 30 million people have the AIDS virus, including three million children under the age of 15. There are whole countries in Africa where more than one-third of the population carries the infection. More than four million require immediate drug treatment. Yet, across that continent only 50,000 AIDS victims are receiving the medicine they need. But the cost of antiretroviral drugs has dropped drastically which places a tremendous possibility within our grasp. Seldom has history offered a greater opportunity to do so much for so many.

His speech was the parting shot for America’s involvement not seen since the Marshall Plan. At stake was nothing less but the saving of a generation in Africa.4 The U.S. Secretary of Health and Human Services, Tommy Thompson,
was one of those charismatic leaders who mobilized both public officials and private business to work on PEPFAR. He took them along on his missions to Africa and showed them how their contributions could make the difference. He impressed on them with dramatic effect that: “It’s like a war, only this war is taking 3 million lives a year!”.

It was on one of those trips, in the company of Tommy Thompson, that John Martin became alerted to AIDS in Africa. It touched him to the core. Upon his return to Foster City, he decided Gilead would ship its drugs, at discounted prices, directly from its manufacturing facilities in the U.S., Canada, and Europe to public and private organizations located in the most affected countries. At the same time, John Martin convinced the University of Leuven and the Academy of Sciences in Prague to relinquish their royalty rights for most of the developing countries.

The first access programs, however, were doomed to failure. Gilead had been emulating other companies, but did not make any headway: it looked more like PR. John Martin realized that a purely philanthropic effort was not sustainable. The company had underestimated the unique challenges facing drug-delivery in poorer countries. Martin also recognized that on its own, the company did not have sufficient capacity to meet global needs for HIV-treatment. He could have abandoned Gilead’s laudable efforts there and then.

But giving up is not in John Martin’s nature. Trial and error rekindled the same spirit that had energized the company since its very beginnings: collaborate and compete. Only through partnerships and collaborations would it be possible to increase drug access.

In 2006, Gilead entered into licensing agreements with Indian manufacturers, granting them rights to produce and sell high-quality, low-cost generic versions of its medicines. Currently 15 Indian manufacturers, one South African and two Chinese companies hold licenses. It became a major success.

All licensees hold either World Health Organizations pre-qualifications or FDA tentative approvals and the vast majority of Gilead’s HIV drugs in developing countries—over 98 percent—are now generics produced by licensees. Partners receive a full technology transfer of the Gilead manufacturing process, enabling them to quickly scale up production. Gilead became the first—and to this day the only pharmaceutical company—to