

First officially recognized in the United States in 1981, has raged the Great Lakes region of Africa since the 1970s; AIDS has so far killed at least 26 million people, orphaned more than 12 million children and today the virus afflicts more than 40 million people directly.ⁱ Still, twenty five years after, the death from the pandemic continues. The first part of the paper discusses the explanations as to why this is so while the final half seeks to do the improbable but not impossible task of overcoming this latest challenge to humanity's existence.

The paper focuses its discussion on one key group and one key issue: the international pharmaceutical companies and the development of accessible and affordable anti-HIV/AIDS drugs to poor patients. The two positions threading this fundamental issue are those by the pharmaceutical companies; claiming to holding both *the solution* and the right to find it while the second position simply disputes this and argues otherwise.

The center of the debate revolves on economics as well as politics and became even more pronounced with the establishment of the international intellectual property rights regime now known as the Trade-Related Aspects of Intellectual Property Rights or TRIPS. In terms of international law, the TRIPS aims to protect patents awarded to pharmaceutical companies by giving monopoly for commercial production of special drugs for up to 20 years, restricting compulsory licensing, preventing export of drugs produced under compulsory licensing, and banning parallel importsⁱⁱ.

In supporting and lobbying for the approval of the agreement, pharmaceutical companies argued that without intellectual property protection, incentives to engage in R&D to discover new cures for illnesses afflicting humanity would not only weaken, but would diminish altogether. As for finding cure for HIV/AIDS, pharmaceutical firms add that without the protection for its patents for antiretroviral drugs, their profits would diminish and therefore, there would be no R&D, no innovation, and thus more and more people would die from AIDS and other deadly diseases.

At first glance, this argument might seem plausible and thus, just fitting to award the self-professed saviors of humanity the protection they want for their prized products. Scrutiny of facts however would make the position by drug firms not only untenable, but absurd as well. And with this comes the realization that when it comes to HIV-AIDS, private pharmaceutical companies are less concerned about saving lives and much more concerned about devising ways to gain more profits.

For us to arrive at this realization, let us unpack and examine their position closely vis-à-vis those of their detractors. The fundamental claim by pharmaceutical companies is that their efforts alone hold the key to drug development, and thus, countries should accept their *monopoly pricing* of drugs through the TRIPS. The second-tier to this basic claim asserts that drug firms spend US\$800 million to develop new drugs, thus, the need to protect their "investments" through patents to encourage them to persevere more for "new" discoveries.

For the purpose of clarity thence, let us ask three questions: First, does the patenting system advocated and got approved by pharmaceutical firms really contribute to the development of breakthrough ideas and experiments? Second, how much is invested by big drug firms in the effort to develop and produce new drugs? Finally, how many of the drugs produced by

pharmaceutical companies directly benefited the greater majority of the world's population? The answer to these questions is not much.

It has been said and proven that intellectual property rights alone have not, do not, and will not spur breakthrough innovation.ⁱⁱⁱ In simpler terms, patents represent privatization of a public resource, like ideas produced through publicly funded research. Traditional yet effective medicinal practices and methods form part of this public resource.^{iv} Contrary to explanation offered by the big drug firms, what patent *actually* does is promote monopoly under the guise of incentive to promote and enhance innovation. Because of its rigidity and outright bias for transnational corporation, the TRIPS is seen as an excessively strong and badly formulated intellectual property rights regime that actually impedes innovation.^v

The economic rationale for the TRIPS as peddled by drug firms is that it affords them faster innovation of new drugs that in turn offsets the relative costs of monopolistic inefficiencies in the market. The reality however is as much as there is relative cost lost by the market for lack of competition, there are even higher costs lost by humanity in general as a result of unwarranted monopolies afforded to big drug firms. What the TRIPS has done thus far is "make the prices of essential medicines significantly greater" meaning the "money from citizens of poor countries will be transferred directly to wealthy pharmaceutical companies."^{vi} Indeed, TRIPS has successfully limited the access of poor patients in third world countries to affordable drugs while ensuring big profits for drug companies.^{vii}

Speaking of profits, just how much of the profits by pharmaceutical companies are used for research and development of new medicines? Again, facts debunk the position of drug firms. Table 1 on the appendix shows that pharmaceutical firms continue to gain profit margins way above than their counterparts in Fortune's Top 500 companies. While this maybe so, they are not investing enough on R&D.^{viii} In truth, pharmaceutical companies have long abandoned their interest for developing a vaccine for HIV/AIDS.^{ix} Considering the vast discrepancy between their enormous profits and their spending on R&D, what remains is just the rhetoric of drug firms that through TRIPS, humanity will see breakthrough innovations in medicines that leads to control, if not eventual vanquishing, of HIV/AIDS.

The truth is there has not been a breakthrough in the field of medicinal research in decades. Looking through the list of new drugs released and manufactured by the ten biggest drug firms show that these are mostly reformulated of previous drugs.^x The fact is the world's poor are being denied access to life-saving drugs because pharmaceutical companies give more importance to diseases suffered by wealthy, middle-aged Americans, such as obesity, heart disease, and the most popular so far, erectile dysfunction.^{xi}

In recent years only a handful of truly important drugs have been brought to the market^{xii} and these were mostly based on taxpayer-funded research at academic institutions, small biotechnology companies, or the National Institutes of Health (NIH).^{xiii} While little has been produced to combat diseases in general, research on drugs to fight tuberculosis, malaria and water-borne diseases prevalent in the poorest countries has been altogether set aside.^{xiv}

Now that the myth of private R&D by pharmaceutical firms has been demystified, one is left asking: just where does the US\$800 million “cost” for development and marketing of a new drug go? Well, according to industry expert Merrill Goozner, the answer lies in the second ingredient --- marketing. He further adds that it is immoral for pharmaceutical firms to pass on consumers the cost of R&D since citizens are already paying much of that bill in the form of taxpayer-financed medical research, which he constantly found to have played a major role in each important medical discovery. ^{xv}

Taking lessons from the discussion above, it is clear that the TRIPS has not worked as intended. For as long as the international intellectual property regime is defined by TRIPS, it will continue to put the interests of the drug companies first, condemning along the way millions in the developing world to premature yet, preventable death.

Because of this sordid fact, it is no surprise that many have called for the complete abrogation of any international agreement on intellectual property rights. But this paper will not. In so far as this is a course for social policy --- the solution being proposed here, while firmly grounded on idealism must also adhere to the mundane rules of the possible, which in essence means finding the middle ground.

Of course, for pragmatic and humanitarian reason, the TRIPS has to go. Not because the world does need an international organization to protect intellectual property, for as a matter of fact there is already one^{xvi}, but primarily because trade liberalization does not and should not be bundled with policies promoting monopoly especially if these have already been found to reflect the interests of big corporations more than the interests of the developing world. ^{xvii}

Having been proven to be ineffective in producing the needed results to combat the spread of HIV/AIDS, what the world needs is a new R&D paradigm not relying on the whims and guarantees of private companies. This paper proposes a three pronged approach to tackle the HIV/AIDS crisis: extremely large government support and intervention to facilitate research and development, complete abandonment of the inflexible TRIPS in favor of a more flexible, humane, and development-friendly intellectual property rights protection regime, and refocusing of AIDS policies from “control and management” through treatment to preventive and curative measures including redirection of R&D efforts to discover vaccines. Collectively and individually, these solutions are difficult to undertake.

Indeed, others may argue these cannot be done. History tells however that if they will it, people through their governments, especially those in industrialized countries can muster enough resources; harness pools of experts, and lead businesses, civil society, and collective individuals toward a completion of a common goal. It has been done before, especially in the face of world annihilation through war or massive deaths through famine. ^{xviii} It can and should certainly be done again in the face of the world-wide AIDS pandemic that is claiming millions of lives every year.

A government-initiative equivalent to the Manhattan Project both in its impact and commitment would go a long way in finding a cure for HIV/AIDS. Pessimists would say discovering a cure or vaccine for AIDS is impossible as others have tried but failed to do so in decades. If one is to look at the global spending on HIV vaccine development however, one is

tempted to say that it is not because discovery is impossible that previous and on-going efforts have failed, but a vaccine *has yet to be discovered* because those in power simply have not tried or spend enough.^{xix}

The original Manhattan Project showed the possibility of splitting atoms to kill millions in an instant. Manhattan Project II^{xx} would be life-preserving and will be made possible if all actors; from governments to businesses, civil society, and the medical community would draw from each other's strength to create a massive coordinated effort to cure the millions suffering from HIV/AIDS.^{xxi}

Of course, a redirection of priorities would accompany this initiative. As already mentioned, pharmaceutical firms conduct 90 percent of their research on diseases prevalent in the rich world --- and that affect less than 10 percent of the global population^{xxii}. A publicly funded research initiative would not be stifled by profit seeking-motives and thus, would prioritize research on diseases endemic in the poorer parts of the world where majority the world's population lives. This Manhattan Project II would also pursue a people-oriented approach to patents. Unlike the TRIPS, a people-centered approach to patents would distinguish essential life-saving drugs to save millions of lives from those that are not. It will see no problem giving 20 or 30 years of strict patent rights to drugs like Viagra and other chemical toys.

Finally, antiretroviral medications, effective as these may be in some cases, are still not curative. Past experiences have shown that programs and projects centered on delivery of antiretroviral medicines, no matter how much these are funded, can only yield limited results.^{xxiii} As such, a reinvigorated and more focused search for preventive AIDS vaccines should be undertaken immediately instead of just diverting funds to treatment measures that only benefits, in the final analysis, pharmaceutical firms producing and supplying antiretroviral drugs.

This is easier said than done of course. For example, two interrelated things are needed to overcome if these proposals are to be realized: 35.9 billion^{xxiv}, and 1. The first figure indicates the combined 2002 profits, in dollars, of the ten biggest pharmaceutical companies while the second figure corresponds to the number of countries that voted against a U.N. resolution on access to drugs in global epidemics such as HIV/AIDS, tuberculosis and malaria. The resolution emphasized that the failure to deliver lifesaving drugs to millions of people who are living with HIV/AIDS constitutes a global health emergency. 167 countries voted in favor of the resolution. The One single vote against it was cast by the United States.

If we can find the solution to convince The 1 that it is to their best interest to switch side and leave the Ten for the millions of sick people living in poor countries, then we may have *finally started to discover* not only the cure for the HIV/AIDS crisis, but more importantly, the solution to humanity's modern-day apathy.

I speak of apathy because in spite of the good things done and benevolent intentions of wealthy countries and individuals to do more, more than 40 million people are still living with HIV around the world. Ignorance has made the disease unknown far too long, but it is apathy of a global scale that has made the pandemic possible. Three decades is enough. There are no excuses left, no rationalizations to hide behind, and no more politics to justify continued indifference. We must act now. For if we do not, there will only be the mass graves of the betrayed as witness to humanity's latest infamy.

Appendix 1

International Pharmaceutical Companies' Profits and Spending (2000)

Company	Revenue (Net Sales in Millions US \$)	Profit (Net Income)	Marketing/Advertising	R & D
Merck and Co., Inc.	\$40,363	17%	15%	6%
Pfizer Inc.	\$29,574	13%	39%	15%
Bristol-Myers Squibb Company	\$18,216	26%	30%	11%
Pharmacia Corporation	\$18,144	4%	37%	15%
Abbott Laboratories	\$13,746	20%	21%	10%
Eli Lilly and Company	\$10,862	28%	30%	19%
Schering-Plough Corporation	\$9,815	20%	36%	14%
Allergan Incorporation	\$1,563	14%	42%	13%

- Source: Collated from reports taken from Treatment Action Campaign at <http://www.tac.org.za/>
- "Rising Drug Prices for America's Seniors," A Report by Families USA, 1334 G Street, NW Washington, DC; (<http://www.familiesusa.org/assets/pdfs/drug4cee.pdf>).
- 1999 Report by the US National Institute for Health Care Management entitled: "Factors Affecting the Growth of Prescription Drug Expenditures," Washington, DC, 1999.
- 1999 figures are also made available by Richard Laing's Department of International Health, School of Public Health, Boston University, Durban South Africa AIDS Conference 11 July 2000, at <http://www.actupny.org/reports/durban-licensing.html>.

ⁱ Laurie Garret. 2005. The lessons of HIV/AIDS. *Foreign Affairs* July/August. Volume 84, Number 4. 51-64.

ⁱⁱ In 2001, the Fourth Ministerial Meeting of the World Trade Organization (WTO) adopted a declaration that public health concerns overrode intellectual property rights and thus paved the way for the lifting of this provision. However, big pharmaceutical firms successfully undermined the agreement by pressuring countries to attach onerous conditions like limiting the sale of inexpensive essential drugs by developing countries with drug manufacturing capacity to those without it.

ⁱⁱⁱ For example, many of the most important ideas of the last century were not and are still not protected by intellectual property. The mathematics that underlies the modern computer and the theories behind atomic energy or lasers are not protected by intellectual property. Also, the current revolution on Information Technology, underpinned by the robust participation of the "open source" movement supports the argument that even products of enormous commercial value can be produced and disseminated with profits without intellectual property protection.

^{iv} Consider a drug based on traditional knowledge, say, of an herb well known for its medicinal properties. How important is the contribution of the American firm that isolates the active ingredient? Pharmaceutical companies argue that they should be entitled to a full patent, paying nothing to the developing country from which the traditional knowledge was taken, even though the country preserves the biodiversity without which the drug would never have come to market. Worse, when firms that have obtained patent for traditional medicines and foods charge developing countries for what they had always thought to be theirs, public resources are not only made private by patents, but are also used to make profits for big companies at the expense of their true and original owners. Hence, the claim by developing countries that what TRIPS does is give license and legal cover to multinational firms to engage in bio-piracy. See Michael Perleman, *Steal This Idea: Intellectual Property and the Corporate Confiscation of Creativity* (New York: Palgrave, 2002).

^v Nobel Laureate and former World Bank Chief Economists Joseph Stiglitz asserted that "ideas are the most important input into research, and if intellectual property slows down the ability to use others' ideas, then scientific and technological progress will suffer." See Joseph E. Stiglitz. 2005. "Intellectual Property Rights and Wrongs," *Daily Times*, September 13. See <http://www.dailytimes.com.pk>

^{vi} Nancy Birdsall, Dani Rodrik, and Arvind Subramanian. 2005. "How to Help Poor Countries," *Foreign Affairs* July/August. Volume 84, Number 4. 136-152.

^{vii} In fact, year after year, for over two decades, this industry has been far and away the most profitable in the United States. In 2003, for the first time, the industry lost its first-place position to mining and crude oil production; industries spurred by the Gulf War. They are however expected to reclaim their number position after the prices of crude oil stabilizes. See Marcia Angell. 2004. *The Truth About the Drug Companies*. New York Review of Books. Available online <http://www.nybooks.com/articles/17244>.

^{viii} In 1998 alone, the 24 pharmaceutical companies holding patents to top 50 selling prescription drugs made a median profit of 20% whereas the other companies in the Fortune 500 list made a 4.4% median profit. In "Rising Drug Prices for America's Seniors," A Report by Families USA, 1334 G Street, NW Washington, DC. November 1999. Copy available at <http://www.familiesusa.org/assets/pdfs/drug4cee.pdf>.

^{ix} In December 2005, The Associated Press reported that Dr. Edmund Tramont, the US Government's Chief of AIDS Research testified before the court that pharmaceutical industry are less committed to any vaccine research and development because it is not a profit center for the companies. See "AIDS expert: Drug companies avoid HIV vaccine research" by John Solomon, Associated Press. December 25, 2005.

^x For example, of the seventy-eight drugs approved by the US FDA in 2002, only seventeen contained new active ingredients, and only seven of these were classified by the FDA as improvements over older drugs. See Marcia Angell. 2004. *The Truth About the Drug Companies*. New York Review of Books. Available online <http://www.nybooks.com/articles/17244>.

^{xi} Dr. David Rhodes, the Health Protection Agency's (HPA) head of business development, acknowledged this when he said during the annual meeting of the organization that spiraling costs are driving firms to invest primarily in drugs that tackle diseases of older Americans. He also reported that more and more pharmaceutical companies are moving their headquarters to the US in search of profits. Once there, they are expected pump money into treatments that help the local population to live longer. See Anushka Asthana. 2005. "Diseases of rich deprive poor of drugs," *The Guardian*. September 11.

^{xii} The truth in fact is that drug firms have not been producing that much on the first place. In 1996, the US Food and Drug Administration (FDA) approved 53 new drugs. In 2002, it approved just 17, the others having reclassified as reformulated ones. See Angell, 2004; and Walden Bello. 2004. "Drug Companies and HIV/AIDS Epidemic," Speech delivered at the debate on patents, drug development, and HIV/AIDS at the XV International AIDS Conference, Bangkok, July 13.

^{xiii} See Angell, 2004; Rhodes acknowledge this fact when he said that with many private companies turning their back on the developing world, research has been heavily dependent on philanthropic funding and government backing, in Asthana, 2005.

^{xiv} For example, despite the fact that tropical diseases were the main killers of the world's peoples, only 13 of 1233 new drugs that reached the market between 1975 and 1997 were approved specifically for tropical diseases. See Bello, 2004.

^{xv} Goozner argues that high prices and big profits are not the key ingredients in pharmaceutical breakthroughs, not to mention that high prices are also not reflective of R&D plus manufacturing costs. He adds that marketing and salaries of executives, not R&D and cost of manufacturing takes the biggest chunk of the US\$800 million expense. See Merrill Goozner. 2004. *The \$800 Million Pill: The Truth behind the Cost of New Drugs* (California, USA: University of California Press).

^{xvi} There is already the World Intellectual Property Organization (WIPO). In October of 2004, they decided to consider what a development-oriented intellectual property regime might look like to replace the TRIPS acknowledging that the current rules of the international economic game reflect the interests of the advanced industrial countries more than the interests of the developing world. The thing is, while the voices of the developing world are heard more clearly in WIPO negotiations; WIPO can only persevere to make WTO listen to the fact that the aim of trade liberalization is to boost development, not hinder it.

^{xvii} As collectively argued by leading economists, that the WTO is mandated to promote development through trade liberalization, intellectual property should never have been included in a trade agreement for an international community that presides over TRIPS and similar agreements already forfeits any claim to being development-friendly. Jagdish Bhagwati. 2004. *In Defense of Globalization*. (Oxford: Oxford University Press); Joseph Stiglitz. 2003. *The Roaring Nineties: Why We're Paying The Highest Price For the Greediest Decade in History*. (London, England: Penguin Books.)

^{xviii} In the past, the state has always recognized that other values may trump intellectual property. The need to prevent excessive monopoly power has led anti-trust authorities to require compulsory licensing (as the US government did with the telephone company AT&T and during the anthrax threat in the wake of the September 11, 2001, terrorist attacks, with Cipro, the best-known antidote). In the past, wealthy countries also spurred technological advances that serve the specific interests of developing countries through foreign research grants (as the green revolution initiated by new varieties of wheat developed at Norman Borlaug's International Maize and Wheat Improvement Center in Mexico and new strains of rice cultivated at the International Rice Research Institute in the Philippines. Yale University's Robert Evenson has estimated that the global return on the research on the new wheat and rice strains was more than 40 percent). See Stiglitz (2004) and Birdsall, et. al. (2005).

^{xix} For example, in 2004 the total amount of investment, both public and private, to find a vaccine for HIV/AIDS was \$680 million. \$526 million of which came from the US government and \$70 million of which came from private corporations and charities. While the government is indeed

spending much for this purpose in comparison with the private drug companies, the overall amount still represents just one percent of total spending on HIV-related programs. See Garret, 2005.

^{xx} Bello, 2004.

^{xxi} For a start, the initiative can be financed through a global fund bulk of the funding can come through a minimal tax imposed on global drug sales. For example, a 1 per cent tax on current global sales of \$450 billion would create a fund of \$4.5 billion annually.

^{xxii} Birdsall, et. al., 2005.

^{xxiii} For example, as of the end of 2005, the WHO 3 by 5 plan to bring ARV treatment to 3 million people in developing countries by 2005 has failed to meet its targets. But this is not the sole reason why this paper is less enthusiastic with antiretroviral treatment. Principally because current anti HIV-AIDS drugs are not curative, to fend off death, they must be taken daily for the rest of a patient's life. But to be effective, the program must last for many years rather than be a one-time expense. If wealthy donors cut off their assistance, few poor countries, if at all, will be able to pick up the treatment costs on their own. A massive wave of death would ensue just because the rich world turned off the life support system of all those on medication.

^{xxiv} 2002 Drug Industry Profits. Public Citizen Congress Watch. 2003. 215 Pennsylvania Ave., Washington D.C. Available online: http://www.citizen.org/documents/Pharma_Report.pdf