**(AFF) The member nations of the World Trade Organization ought to reduce intellectual property protections for medicines**

**(Alex Li)**

**I affirm the resolution, resolved: The member nations of the World Trade Organization ought to reduce intellectual property protections for medicines**

**Before my case I offer the following definitions:**

**Ought: used to indicate a desirable state [Oxford Dictionary Definition]**

**Intellectual Property Protections: [World Intellectual Property Organization]**

Intellectual property (IP) refers to **creations of the mind, such as inventions**; literary and artistic works; designs; and symbols, names and images used in commerce. IP is **protected in law by**, for example, **patents, copyright and trademarks**, **which enable** people to earn recognition or **financial benefit** from what they invent or create. By striking the right balance between the interests of innovators and the wider public interest, the IP system aims to foster an environment in which creativity and innovation can flourish.

**Medicine: the science and art dealing with the maintenance of health and the prevention, alleviation, or cure of disease [Merriam-Webster Dictionary Definition]**

### **Affirmative Framework**

**I value Equality, and my value criterion is minimizing structural violence**

**[Chicago Center of Health Equity Research] Structural Violence Definition: the** multiple **ways** in which **social, economic, and political systems expose particular populations to risks and vulnerabilities leading to increased morbidity and mortality.** Those **systems include income inequality, racism, homophobia, anti-Semitism, Islamophobia, sexism, ableism, and other means** of social exclusion **leading to vulnerabilities, such as poverty**, stress, trauma, crime, incarceration, **lack of access to care**, healthy food, and physical activity.

**Structural violence** are social forces that **harm certain groups of people, producing and perpetuating inequality in health and well-being**. It includes **social, economic, and political processes** that **manifest** in both material and symbolic **means of social exclusion**.

**Definition in my own words: Structural violence refers to a form of violence wherein a social structure or social institution may harm people by preventing them from meeting their basic needs.**

**Saleem, Rakhshanda** et al. 20**16** [Psychologist at Lesley University] [“The Effects of Structural Violence on the Wellbeing of Marginalized Communities in the United States”](https://digitalcommons.lesley.edu/cgi/viewcontent.cgi?article=1048&context=jppp#:~:text=It%20results%20from%20societal%20resources,1969%3B%20Farmer%2C%202004).) AL

**Structural violence** refers to injustices **embedded in social** and institutional **structures within societies** that result in **harm** to **individual**s’ **well-being.** It results from **societal resources** being **distribute**d **unfairly, leading to** gross **disparities in income,** literacy, education **and access to** health and mental **health services**

**Galtung**, Johan, 20**17** [Norweigen Sociologist] “JUSTICE AND RESTORATIVE JUSTICE” <https://www.alfadeltapi.org/wp-content/uploads/2017/03/GaltungADPRestorativeJustice.pdf> AL

**Under equitative justice the focus is on "equity", creating structures that generate mutual and equal benefi**t. Positive peace.

### **Contention I: IPP Fuels Inequality**

**Quigly**, Fran [Director of Operations at Indiana University of Medicine] “Making Medicines Accessible: Alternatives to the Flawed Patent System.” 20**15**. <https://www.hhrjournal.org/2015/11/making-medicines-accessible-alternatives-to-the-flawed-patent-system-2/> AL

Like a poorly conceived new drug with deadly side effects, the modern medicine patent regime is a relatively recent innovation and, not a good one. Although pharmaceutical patent laws can vary between nations, **the 1994 Agreement** on **Trade-Related Aspects of Intellectual Property Rights** **(TRIPS)** **created a** near-uniform **global** system. This **system** is **designed to incentivize** innovation by rewarding inventors of new medicines with **government-granted monopolies known as patents.**2 During the monopoly period, usually 20 years, **the patent holder can produce the medicine and charge whatever price the market will bear, without fear of competition.** Since **medicines are necessary to life and well-being,** high-income **markets** usually **bear high prices.** **Yet medicines are typically inexpensive to manufacture.**3 As a result, the modern pharmaceutical industry is one of the most profitable sectors in recent history.4 One core flaw of the medicine patent scheme is that **it motivates innovation only if potential patent-holders anticipate that the developed medicine will be sold at high prices.** For example, the patent system incentivizes development of drugs for male pattern baldness, which will sell vigorously in comparatively wealthy countries. But **the system fails to motivate research and development of medicines to combat** the **diseases that sicken and kill millions of the global poor.**5 Under the patent regime, erectile dysfunction and acne drugs proliferate. Yet only one new drug has come on the market in the last half-century to treat tuberculosis, a disease which killed 1.5 million people in 2013.6 Nor does the current system lead to wide availability and affordability for many existing drugs:10 million people die each year for lack of access to medicines.7 Even for the medicines that address the health needs of 10 It is therefore no surprise that the medicine patent system has come in for criticism, especially by human rights agencies and advocates. The World Health Organization regards the situation as a health rights concern and has concluded that **inequality and discrimination in access to essential medicines remain the key public health challenge of our times.** Some critics call for the pharmaceutical industry to devote greater resources to the needs of the poor, while others question whether discovery and distribution of life-saving medicines should be a for-profit enterprise at all.11 National constitutions, courts and international agencies increasingly characterize access to essential medicines as a human right, not a commodity to be purchased by a fortunate few.

**Oxfam**. [Charitable Organization] “Patent Injustice: How World Trade Rules Threaten the Health of Poor People.” 20**01**. https://www.iatp.org/sites/default/files/Cut\_the\_Cost\_-\_Patent\_Injustice\_How\_World\_Trad.htm AL

At a time when millions of lives are at risk from newly-virulent diseases, and from the increasing drug resistance to old killers, **trade rules threaten to make basic medicines even less affordable to the poor. WTO rules provide limited public-health safeguards, especially in the case of national health emergencies.** These are hedged in by onerous conditions and, in practice, efforts to apply these measures have been fiercely contested by pharmaceutical companies, often with the backing of Northern governments. It is hard to argue that **HIV/AIDS** does not **represent a national emergency in South Africa, where it is projected to reduce life-expectancy by 20 years** by 2010, or **in Thailand**, where **there are almost one million sufferers.** Yet in both cases, efforts to provide cheap generic medicines have been met with legal challenges mounted by formidably powerful corporations. **In Kenya, one quarter of the adult population is HIV-positive, but fewer than two percent receive** antiretroviral **treatment. If the country were able to import the drug** fluconazole, **used in** the **treatment** of cryptococcal meningitis (an opportunistic infection associated with HIV/AIDS), from Thailand, **it could reduce the annual cost** of treatment **from over US$3000 to US$104. However**, the patent holder for the drug, the **Pfizer** corporation**, applied pressure to stop** such **imports** taking place. Even with less onerous conditions for compulsory licensing, **countries with limited production capacity or small internal markets will find it impossible to obtain the required drug at an affordable price,** unless there is a larger country which is producing it under a compulsory licence and which is willing and able to export it to them. Any **analysis of the potential impact of the WTO’s IP rules has to start with the recognition of a simple fact: namely, millions of the world’s poorest people are unable to afford the cost of treating the infectious diseases which blight their lives**

**The WTO’s Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) causes massive global health inequality**

K. M. **Gopakumar 15**, legal advisor and senior researcher with the Third World Network, “Twenty years of TRIPS agreement and access to medicine: a development perspective,” Indian Journal of International Law 55, 367–404 2015, https://link.springer.com/article/10.1007%2Fs40901-016-0022-7

The two **decades of TRIPS show** clearly that the compulsory product **patent regime** succeeded in **increasing the monopoly of pharmaceutical TNCs (Transnational Corporations)** in new medicine market. The product patent regime has put curbs on the availability of generic versions of new medicines. The failure of patent system resulted in the call for fresh look at the role of patent and public policy. Two economists argue that ‘‘…public policy should aim to decrease patent monopolies gradually but surely, and ultimate goal should be the abolition of patents.’’107 Another academic notes: ‘‘Even pharmaceutical and biotech companies usually do not need more than about a decade of monopoly power to encourage their very large investments in new drugs.’’108 **There is** an **urgent need to interrogate** the **international IP regime** in general and patent protection for pharmaceuticals in particular, **which does not reflect the health** and development **needs of people**, especially those living **in developing countries**. The Declaration on Patent Protection: Regulatory Sovereignty under TRIPS released in 2014, an initiative of the Max Plank Institute for Innovation and Competition on the occasion of the 20th anniversary of the TRIPS notes four major developments that require accommodating the law to changed circumstances. First, the ‘historically unprecedented numbers of patents filings and grants’ create problems such as backlogs at patent offices, patent thickets, market entry barriers and increased litigation that ultimately generate impediments to research and commercialisation. The result is rising costs of monitoring **patents** and legal uncertainty, **limiting** the **economic freedom** of market participants, which in turn **affects consumer welfare and distorts competition.** Thus ‘the overall **social benefits of innovation are reduced while an imbalance emerges** between those able to cope with the resulting insecurities and related costs, such as multinational enterprises with their own patent departments, and those who cannot, such as small and medium sized enterprises or individual inventors.’109 Second, the new technologies like biotechnology, business methods and computer science as well as standard setting, strategic patenting and non-practising entities all affect the functioning of the patent system as a regulatory institution. Third, the role of patents in corporate management has undergone a change from a defensive means to protect research and development outcomes to become strategic assets to influence the conditions of competition. Fourth, the industrialised countries have tilted the balance in the patent regime towards right holders by reducing the burden for the patent applicants such as expanded scope of patentability, lower eligibility standards and reduced fees, as well as extending the rights of patent owners such as longer term of patent, harsher sanctions, strengthened ways for private and public enforcement. Therefore, the Declaration states: ‘the patent system faces increasing friction with ancillary public policy goals, such as protecting the environment, preserving biodiversity or ensuring affordable access to medicines.’110 Against this background there is an urgent need to review the TRIPS patent regime, especially the compulsory product patent protection. The Agreement itself contains provisions to review its implementation. Article 71.1 of the TRIPS Agreement provides mandatory review of the implementation of this Agreement after the expiration of the transitional period referred to in paragraph 2 of Article 65. Hence this review was to initiate in 2010. According to Art.71.1: The Council shall, having regard to the experience gained in its implementation, 10 File Title review it two years after that date, and at identical intervals thereafter. The Council may also undertake reviews in the light of any relevant new developments, which might warrant modification or amendment of this Agreement. There is a fear that the review may result in an opposite result if developed countries use the opportunity of review to push for TRIPS plus amendments using the second sentence of Article 71.1. However, Para 19 of the Doha Ministerial Declaration clearly defines the mandate of the review. It states, ‘‘The Council may also undertake reviews in the light of any relevant new developments, which might warrant modification or amendment of this Agreement.’’111 However, so far no WTO Member State submitted any proposal in this regard. It is important for developing countries to propose amendment of the compulsory product patent protection in the light of experiences under 20 years of TRIPS Patent Regime. Echoing the same sentiment, the UNDP-appointed Global Commission on HIV and the Law observed the **‘TRIPS has failed to encourage and reward the kind of innovation** that makes more effective pharmaceutical products available to the poor, including for neglected diseases. Countries must, therefore, develop, agree and invest in new systems that genuinely serve this purpose, prioritising the most promising approaches including a new pharmaceutical R&amp;D treaty and the promotion of open source discovery.’112 Further, the Commission recommended that: The UN Secretary-General must convene a neutral, high-level body to review and assess proposals and recommend a new intellectual property regime for pharmaceutical products. Such a regime should be consistent with international human rights law and public health requirements, while safeguarding the justifiable rights of inventors. Such a body should include representation from the High Commissioner on Human Rights, WHO, WTO, UNDP, UNAIDS and WIPO, as well as the Special Rapporteur on the Right to Health, key technical agencies and experts, and private sector and civil society representatives, including people living with HIV. This re-evaluation, based on human rights, should take into account and build on efforts underway at WHO, such as its Global Strategy and Plan of Action on Public Health, Innovation, and Intellectual Property and the work of its Consultative Expert Working Group. Pending this review, **the WTO** Members **must suspend TRIPS as it relates to** essential **pharmaceutical products** for low- and middle-income countries.113 As part of the implementation of the recommendation UN SecretaryGeneral has established a 16-member High Level Panel on Access to Medicines. This Panel is to review and assess various proposals and make recommendation to ‘‘remedy the policy incoherence between international human rights law and trade rules in the context of access and health technologies.’’114 It is expected to look at a new IP regime, which can ensure both access and innovation as recommended by the Global Commission on HIV/AIDS. The **incoherence between trade law and human rights law cannot be addressed by** using flexibilities in **the TRIPS Agreement.** As long as an international obligation to provide product patent protection for pharmaceutical inventions exists, the above-mentioned incoherence is also to exist. Therefore, **it is important to restructure** the **TRIPS** and TRIPS plus IP regime, **which not only prevent** the **access to affordable medicine, but also failed to deliver access to R&D needs of developing countries.** There is a need to provide enough policy space for countries to design their patent laws, especially to fulfill their human right obligations on right to health and right to science. Scrapping of the compulsory product patent protection under the TRIPS Agreement is critical to serve this purpose.

Andres **Delegado** et al. 20**16**, [Graduate Student in the Master of Public Policy and Global Affairs Program at the University of British Columbia.] https://opencanada.org/inequality-explained-trouble-pharmaceutical-patents/ AL

**Access to medicines is** inextricably **tied to human rights and empowerment. The World Health Organization recognized such access as a social right in 1946**, and two years later it was **included in the Universal Declaration of Human Rights.** **In 1966, the International Covenant on Economic, Social and Cultural Rights stated that access to health goods is a requisite for the realization of the right to health.** Therefore, the drug market requires a custom-fit solution which incentivizes research and effective distribution to all economic classes, following principles of accessibility, availability, appropriateness and assured quality, while allowing drug and vaccine producers to remain competitive and financially viable. **Of** the **1.9 billion children from the developing world, there are 270 million with no access to health services** (one in seven). Worldwide, **15 million children have been orphaned due to HIV/AIDS** (similar to the total population of children in Germany or the United Kingdom). The dissenting voices of NGOs and civil societies have focused on the detrimental aspects that patent rights impose on what is argued should be a public good. In order **to address the systemic inequality** that is **perpetuated by** our current **patent systems**, these dissenting **voices** will also **need to come from** governments and **international organizations** to combat a system predicated mainly on greed.

**Global health inequality drives demodernization**

Katherine **Hirschfeld 19**, Associate Professor in the University of Oklahoma & Department of Anthropology, “Microbial insurgency: Theorizing global health in the Anthropocene,” October 23rd , 2019, https://journals.sagepub.com/doi/full/10.1177/2053019619882781

**Macro-level problems of** security and **governance** also **create geographic barriers to vaccination and other public health efforts.** Armed conflicts in border areas between Uganda and the Democratic Republic of the Congo, for instance, have displaced over 800,000 people and sent refugees into neighboring Rwanda and Burundi (Quinn, 2018). According to one journalist, “insurgents . . . have attacked military personnel, aid workers and civilians and have held priests and government personnel hostage” (McFarland, 2018). Efforts to control Ebola fever in this region have been limited by these logistical and security concerns, and health workers have been forced to suspend operations in some high-risk areas (Fox, 2018). The result has been a slow and steady increase in Ebola cases and deaths, despite the availability of a successful vaccine (Drake, 2019). Unfortunately, the **environmental crises** of the Anthropocene are likely to **create** more of these kinds of **turbulent apolitical spaces**: conflict zones under the control of warlords or other armed insurgents competing with one another for monopoly control of illicit extractive industries. **There is no public health in these spaces** because there is no public sector—**conflict zones remain** within the mapped boundaries of mapped political space, but **beyond the reach of government health agencies.** As a result, **these regions are vulnerable to rapid “demodernization,”** including **demodernization of health** and mortality patterns that may ultimately **shift the world**’s health patterns **back to an “age of pestilence and famine.”**

**Reducing IPP is key-- the past proves that this works, and solves the problems**

Ellen’t **Hoen** 20**16**, PRIVATE PATENTS AND PUBLIC HEALTH (pg. 57)

https://haiweb.org/wp-content/uploads/2016/07/Private-Patents-Public-Health.pdf/ AL

**On October 23, 2009, Ecuador’s President**, Rafael Correa, **declared “access to medicines** used for the treatment of diseases that affect the Ecuadorian population and are priorities for public health”, a matter of public interest, **and that “compulsory licences may be granted for patents** on any human use medicine that may be necessary for treatment.” **Following this decree**, the patent office has received 32 applications for compulsory licences. **Ecuador** has **issued** compulsory **licences to allow for lower-cost generics** of six products to be **made available for the treatment of HIV, cancer**, with kidney transplant and arthritis. Civil society groups in Ecuador have been involved in the advocacy for access to new medicines.

(pg 63. )

Not all compulsory licence (CL) instances presented here were granted or executed. For example, Thailand suspended the CL for imatinib after the patent-holding company established a donation program. Brazil did the same once it obtained a lower price for one of the ARVs. **These instances** of CL use are nevertheless interesting because they **illustrate that** even the threat of the use of **compulsory licensing can lead to a response by the patent holder to offer a better price, offer a voluntary licence or provide access to the product in question.**

### **Contention II: IPP Does Not Innovate Effectively**

**Quigly**, Fran [Director of Operations at Indiana University of Medicine] “Making Medicines Accessible: Alternatives to the Flawed Patent System.” 20**15**. <https://www.hhrjournal.org/2015/11/making-medicines-accessible-alternatives-to-the-flawed-patent-system-2/> AL

persons who can afford high prices, **the patent system fails to spur innovation effectively. When rewards are contingent on exclusivity, research is conducted in secret**ive silos. **Open-source innovation is unthinkable**. Just as disturbing, the **patent profit motive leads to** resources being devoted to the **development of “me-too” drugs, created in the effort to carve out a share of the high-income market for blockbuster medicines.8 Over 70% of medicines** brought to the market **in the last two decades provided no new therapeutic benefit over the products already available**.9 **A marketplace saturated with different brands of similar drugs helps trigger the industry expenditures on sales and advertising that are so large they exceed its investment in research and development.**

**Empirical studies show this**

Hon. Maureen K. **Ohlhausen**, 20**16**, [Former Commissioner of the Federal Trade Commission, Designated by Donald J. Trump]

https://www.ftc.gov/system/files/documents/public\_statements/1050923/ohlhausen\_-\_harvard\_article\_1-18-17.pdf

Also noteworthy is **Petra Moser’s 2013 review of economic evidence on** the relationship between **patents and innovation.**184 He **concluded**, Overall, **the weight of** the **existing historical evidence suggests** that patent policies, which grant **strong intellectual property rights** to early generations of inventors, may **discourage innovation**. On the contrary, policies that encourage the diffusion of ideas and modify patent laws to facilitate entry and encourage competition may be an effective mechanism to encourage innovation.

Theory suggests that **expanding patent scope will not** always **enhance innovation**.226 That result is intuitive. Strengthening **patent protection** should enhance the incentive to invent a new product or proprocess, but it may **reduce the propensity to improve upon existing** proprietary **technologies.** At least one study finds empirical support for the proposition that strengthening IP rights beyond a critical point may discourage innovation.229 To the extent that finding reflects a causal relationship, it may mirror evidence of an inverted-U-shaped relationship between product-market competition and innovation

**TRIPS Chilling Effect**

Ramon Abraham A. **Sarmiento 03**, Research Assistant, Institute of International Legal Studies,University of the Philippines Law Center, “Lost in Translation: The TRIPS Agreement and Its Chilling Effecton Innovation,” World Bulletin: Bulletin of the International Studies of the Philippines, 21, 67-82.

Currently TRIPS only provides minimum standards of protection for intellectual property because WTO member states may legislate beyond the TRIPS.&#39; As such **TRIPS is insufficient in** its **promotion of innovation** as it lacks rules that impose maximum standards. This **insufficiency** in the TRIPS agreement **is detrimental to innovation**, as the **lack of** 22 File Title **harmonization** of intellectual property laws has **created a chaos-filled situation that** in turn **has a chilling effect on innovation.** The chilling effects of TRIPS are two fold, first the **universal** or minimum **standards** imposed by it **favor the West** because TRIPS allows the West especially the United States to impose their more stringent standards on less developed nations thereby **stifling the innovation in less developed nations** and the emergence of a reliable public domain.2 Second, **the West has less incentive to innovate as it can** instead **focus its energies on protecting its current intellectual property** often **by bullying less developed nations into compliance.** In short, an agreement that aims to promote innovation through the protection of intellectual property instead has the opposite effect by chilling the drive for innovation. **The TRIPS chilling effect** stems from a protection that over reaches, is not through the outright prohibition of innovation but through providing rules that **stifle innovation by handicapping the less developed nations** and **making it more beneficial for the West to overly protect its intellectual property rather than to innovate.**

**Economic inequality leads to catastrophe, and tanks well-being**

**Stewert Lansley 12**  (Citation not finished) https://www.theguardian.com/business/2012/feb/05/inequality-leads-to-economic-collapse

**The effect of this** consolidation of economic power **is that** the two most effective routes out of the crisis have been closed. First, **consumer demand** – the oxygen that makes economies work – **has been choked off.** Rich economies have lost billions of pounds of spending power. Secondly, the slump in demand might be less damaging if the winners from the process of upward redistribution – big business and the top 1% – were playing a more productive role in helping recovery. They are not.

Britain's richest 1,000 have accumulated fortunes that are collectively worth £250bn more than a decade ago. The biggest global corporations are also sitting on near-record levels of cash. In the UK, such corporate surpluses stand at over £60bn, around 5% of the size of the economy. This money could be used to kickstart growth. Yet it is mostly standing idle. The result is paralysis.

The economic orthodoxy of the past 30 years holds that a stiff dose of inequality brings more efficient and faster-growing economies. It was a theory that captured the New Labour leadership – as long as tackling poverty was made a priority, then the rich should be allowed to flourish.

So have the architects of market capitalism been proved right? The evidence says no. The wealth gap has soared, but without wider economic progress. Since 1980, UK growth and productivity rates have been a third lower and unemployment five times higher than in the postwar era of "regulated capitalism". The three post-1980 recessions have been deeper and longer than those of the 1950s and 1960s, culminating in the crisis of the last four years.

The main outcome of the post-1980 experiment has been an economy that is much more polarised and much more prone to crisis. **History shows a clear link between inequality and instability. The two most damaging crises of the last century – the Great Depression of the 1930s and the Great Crash of 2008 – were both preceded by sharp rises in inequality.**

**The factor linking excessive levels of inequality and economic crisis is to be found** in the relationship between wages and productivity. For the two-and-a-half decades from 1945, wages and productivity moved broadly **in line across richer nations, with the proceeds of rising prosperity evenly shared.** This was also a period of sustained economic stability.

**Only global pharmaceutical innovation solves global pandemics that risk extinction**

Jeffrey **Sachs 14**, Professor of Sustainable Development, Health Policy and Management @ Columbia University, Director of the Earth Institute @ Columbia University and Special adviser to the United Nations Secretary-General on the Millennium Development Goals) “Important lessons from Ebola outbreak,” Business World Online, August 17, 2014, http://tinyurl.com/kjgvyro

**Ebola is the latest of many** recent **epidemics**, also **including AIDS, SARS**, H1N1 flu, H7N9 flu, **and others**. AIDS is the deadliest of these killers, claiming nearly 36 million lives since 1981. Of course, **even larger** and more **sudden epidemics are possible, such as the 1918 influenza during World War I, which claimed 50-100 million lives** (far more than the war itself). And, though the 2003 SARS outbreak was contained, causing fewer than 1,000 deaths, the disease was on the verge of deeply disrupting several East Asian economies including China’s. There are four crucial facts to understand about Ebola and the other epidemics. First, **most emerging infectious diseases** are zoonoses, meaning that they start in animal populations, sometimes with a genetic mutation that enables the **jump to humans**. Ebola may have been transmitted from bats; HIV/AIDS emerged from chimpanzees; SARS most likely came from civets traded in animal markets in southern China; and influenza strains such as H1N1 and H7N9 arose from genetic re-combinations of viruses among wild and farm animals. New **zoonotic diseases are inevitable as humanity pushes into new ecosystems** (such as formerly remote forest regions); the food industry creates more conditions for genetic recombination; and climate change scrambles natural habitats and species interactions. Second, **once a** new infectious **disease appears, its spread** through airlines, ships, megacities, and trade in animal products **is** likely to be **extremely rapid**. These epidemic diseases are new markers of globalization, revealing through their chain of death how vulnerable the world has become from the pervasive movement of people and goods. Third, the poor are the first to suffer and the worst affected. The rural poor live closest to the infected animals that first transmit the disease. They often hunt and eat bushmeat, leaving them vulnerable to infection. Poor, often illiterate, individuals are generally unaware of how infectious diseases -- especially unfamiliar diseases -- are transmitted, making them much more likely to become infected and to infect others. Moreover, given poor nutrition and lack of access to basic health services, their weakened immune systems are easily overcome by infections that better nourished and treated individuals can survive. And “de-medicalized” 16 File Title conditions -- with few if any professional health workers to ensure an appropriate public-health response to an epidemic (such as isolation of infected individuals, tracing of contacts, surveillance, and so forth) -- make initial outbreaks more severe. Finally, the **required** medical responses, including diagnostic **tools** and effective medications and vaccines, inevitably lag behind the emerging diseases. In any event, such tools **must be** continually **replenished**. **This requires cutting-edge biotechnology, immunology**, **and** ultimately **bioengineering to create large-scale** industrial **responses** (**such as** millions of doses of **vaccines or medicines** in the case of large epidemics). The AIDS crisis, for example, called forth tens of billions of dollars for research and development -- and similarly substantial commitments by the pharmaceutical industry -- to produce lifesaving antiretroviral drugs at global scale. Yet each breakthrough inevitably leads to the pathogen’s mutation, rendering previous treatments less effective. There is no ultimate victory, only a constant arms race between humanity and disease-causing agents.

**The inequality institutionalized into the IPP system and less developed nations is extremely significant. Reducing IPP allows for the basic needs of overall health and maximizing life to be better met when minimizing structural violence. Thus, I urge the judge to vote for an affirmative ballot.**