## 1

#### Interpretation – the Affirmative must present a delineated enforcement mechanism for the Plan. There is no normal means since terms are negotiated contextually among member states.

WTO "Whose WTO is it anyway?" <https://www.wto.org/english/thewto_e/whatis_e/tif_e/org1_e.htm> //Elmer

**When WTO rules impose disciplines** on countries’ policies, **that is the outcome of negotiations among WTO members.** The rules are **enforced** **by** the **members themselves** **under agreed procedures that they negotiated**, **including the possibility of trade sanctions**. But those sanctions are imposed by member countries, and authorized by the membership as a whole. This is quite different from other agencies whose bureaucracies can, for example, influence a country’s policy by threatening to withhold credit.

#### Violation: they don’t

#### Standards

#### 1. Shiftiness- They can redefine the 1AC’s enforcement mechanism in the 1AR which allows them to recontextualize their enforcement mechanism to wriggle out of DA’s since all DA links are predicated on type of enforcement i.e. sanctions bad das, domestic politics das off of backlash, information research sharing da if they put monetary punishments, or trade das.

#### 2. Real World - Policy makers will always specify how the mandates of the plan should be endorsed. It also means zero solvency, absent spec, states can circumvent the Aff’s policy since there is no delineated way to enforce the affirmative which means there’s no way to actualize any of their solvency arguments.

#### ESpec isn’t regressive or arbitrary- it’s an active part of the WTO is central to any advocacy about international IP law since the only uniqueness of a reduction of IP protections is how effective its enforcement is.

#### Paradigm:

#### Fairness – Debate is a competitive activity governed by rules. You can’t evaluate who did better debating if the round is structurally skewed, so fairness is a gateway to substantive debate.

#### DTD – Time spent on theory cant be compensated for, the 1nc was already skewed, and its key to deterring abuse.

#### Prefer Competing interps -

#### 1. reasonability is arbitrary and invites judge intervention.

#### 2. it Causes a race to the bottom where debaters push the limit as to how reasonably abusive, they can be.

#### No RVI’s -

#### 1. Chills some debaters from reading theory against abusive postions.

#### 2. incentivizes theory baiting where you can just bait theory to win.

## 2

#### Interpretation: Reduce means permanent reduction – it’s distinct from “waive” or “suspend.”

**Reynolds 59** (Judge (In the Matter of Doris A. Montesani, Petitioner, v. Arthur Levitt, as Comptroller of the State of New York, et al., Respondents [NO NUMBER IN ORIGINAL] Supreme Court of New York, Appellate Division, Third Department 9 A.D.2d 51; 189 N.Y.S.2d 695; 1959 N.Y. App. Div. LEXIS 7391 August 13, 1959, lexis)

Section 83's counterpart with regard to nondisability pensioners, section 84, prescribes a reduction only if the pensioner should again take a public job. The disability pensioner is penalized if he takes any type of employment. The reason for the difference, of course, is that in one case the only reason pension benefits are available is because the pensioner is considered incapable of gainful employment, while in the other he has fully completed his "tour" and is considered as having earned his reward with almost no strings attached. It would be manifestly unfair to the ordinary retiree to accord the disability retiree the benefits of the System to which they both belong when the latter is otherwise capable of earning a living and had not fulfilled his service obligation. If it were to be held that withholdings under section 83 were payable whenever the pensioner died or stopped his other employment the whole purpose of the provision would be defeated, i.e., the System might just as well have continued payments during the other employment since it must later pay it anyway.  [\*\*\*13] The section says "reduced", does not say that monthly payments shall be temporarily suspended; it says that the pension itself shall be reduced. The plain dictionary meaning of the word is to diminish, lower or degrade. The word "reduce" seems adequately to indicate permanency.

#### Violation:

#### Standards:

#### 1. Neg Ground – Core neg generics like innovation and biotech heg are predicated on scope of effect – minor modifications in how long a patent lasts for or what it effects allows the 1AR to minimize our links to zero which destroys being neg on a topic w/ very little generic ground.

#### 2. Limits – Allowing affs to make patent modifications explodes aff ground by three-fold because for all four intellectual property protections for every medicine MULTIPLIED by different time modifications, different scope modifications which makes predictable preparation and in-depth clash impossible.

#### 2. TVA solves – permanently reduce \_\_\_\_

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## 3

#### Interpretation – Marijuana isn’t a medicine.

Mosley 20, Mark. "Medical Marijuana Is a Dangerous Lie." Emergency Medicine News 42.8 (2020): 2-3. (Dr. Mark Mosley is an emergency medicine physician in Wichita, Kansas and is affiliated with Wesley Healthcare Center. He received his medical degree from University of Oklahoma College of Medicine and has been in practice for more than 20 years.)//Elmer

**Marijuana is not a medical drug.** It is a **slang term for** a **plant of the Cannabis family that contains more than 60 different cannabinoid substances and more than 80 biologically active compounds**. Using the term marijuana in place of THC would be like using willow tree in place of acetylsalicylic acid, the active ingredient in aspirin.

#### FDA and CDC definitions prove.

CDC 18 (CDC; Centers for Disease Control and Prevention; 3-7-2018; “**Is marijuana medicine**?”; CDC; <https://www.cdc.gov/marijuana/faqs/is-marijuana-medicine.html>; Accessed: 9-4-2021; AU)

The marijuana plant has chemicals that may help symptoms for some health problems. More and more states are making it legal to use the plant as medicine for certain conditions. But there isn’t **enough research** to show that the whole plant works to treat or cure these conditions. Also, the U.S. Food and Drug Administration (FDA) **has not recognized** or **approved** the marijuana plant **as medicine**. Because marijuana is often smoked, it can damage your lungs and cardiovascular system (e.g., heart and blood vessels). These and other damaging effects on the brain and body could make marijuana more harmful than helpful as a medicine. Another problem with marijuana as a medicine is that the ingredients aren’t exactly the same from plant to plant. There’s no way to know what kind and how much of a chemical you’re getting.

#### **Violation:**

#### Standards:

#### 1. Limits and ground. Expanding the definition of “medicine” to anything that could be used in a medical setting floods the neg with cases to prep for – everything from new methods of chemo to upgrading stethoscopes becomes topical.

#### At best – they’re extra-T since Cannabis isn’t intrinsically medicinal, it just has medicinal uses so they would reduce Recreational Marijuana patents too which isn’t topical and explodes limits.

Johnson 20 Ian Johnson 1-20-2020 "Cannabis Patents 2000 – 2019: Trends Following Legalization" <https://plantlaw.com/2020/01/20/cannabis-trends-medical-recreational/> (Registered Patent Agent, Plant & Planet Law Firm)//Elmer

These findings correspond to the overall increase in **cannabis-related patents** and demonstrate that the recreational patent sector is growing at an even greater rate than cannabis patents generally. This supports the theory that recreational markets and expansion of legal personal use of cannabis have resulted in an increase in patent activity in the industry. Again, publication totals are not necessarily the most accurate reflection of patent behavior by cannabis businesses. Therefore, it is useful to examine filing and provisional trends for recreational patents. These results are subject to the same 18-month delay problems noted above, and therefore actual and projected values are provided. Using actual filing data for 2017, there has been a 181% increase in filing activity since 2012. Using projected filing data for 2019, there has been a 257% increase in recreational filing activity since 2012. Using actual priority claims for 2017, there has been a 196% increase in provisional filing activity since 2012. Using projected priority claims for 2019, there has been a 289% increase in recreational provisional filing activity since 2012. The following charts demonstrate recreational filing trends from 2012 to 2019. Patents **that could be classified as recreational** **made up approximately 53% of all filings** between 2000 and 2011. However, **following legalization** the percent of patents and applications considered recreational has **increased to** approximately **77% of filings in 2018**. The chart below demonstrates the growth of the recreational sector’s share of cannabis patent activity.

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## 4

#### The ROB is to determine the truth of falsity of the resolution –

#### 1] Textuality – five dictionaries[[1]](#footnote-1) define to negate as to deny the truth of and affirm[[2]](#footnote-2) as to prove true.

#### That OW –

#### a] Jurisdiction – judges are constrained through their constitutive purpose and proves it’s a side constraint on what arguments they can vote on.

#### b] Predictability – people base prep off the pregiven terms in the resolution.

#### 2] Isomorphism – alternative ROBs aren’t binary truth/false because of topic lit biases which increases intervention and takes the debate out of the hands of debaters.

#### 3] Inclusion – any offense functions under it as long as debaters implicate their positions to prove the truth or falsity of the resolution which maximizes substantive clash through ground and is a sequencing question for engaging in debate.

#### 4] Logic – any statement relies on a conception of truth to function – for example, I’m hungry is the same as its true that I’m hungry – logic is a litmus test for any argument and proves your ROB collapse since it relies on truth.

#### Presumption and permissibility negates – a) more often false than true since I can prove something false in infinite ways b) real world policies require positive justification before being adopted – there’s alwahys an institutional DA to going through Congress c) ought[[3]](#footnote-3) means “moral obligation” so the lack of that obligation means the aff hasn’t fulfilled their burden

#### Negate –

#### 1] member[[4]](#footnote-4) is “a part or organ of the body, especially a limb” but an organ can’t have obligations

#### 2] of[[5]](#footnote-5) is to “expressing an age” but the rez doesn’t delineate a length of time

#### 3] the[[6]](#footnote-6) is “denoting a disease or affliction” but the WTO isn’t a disease

#### 4] to[[7]](#footnote-7) is to “expressing motion in the direction of (a particular location)” but the rez doesn’t have a location

#### 5] reduce[[8]](#footnote-8) is to “(of a person) lose weight, typically by dieting” but IP doesn’t have a body to lose weight.

#### 6] for[[9]](#footnote-9) is “in place of” but medicines aren’t replacing IP.

#### 7] medicine[[10]](#footnote-10) is “(especially among some North American Indian peoples) a spell, charm, or fetish believed to have healing, protective, or other power” but you can’t have IP for a spell.

## 5

#### CP Text: Member states of the World Trade Organization should enter into a prior and binding consultation with the World Health Organization on whether or not to [do the Plan]. The World Health Organization ought to publicly declare that their decision on [the Plan] will represent their future decisions on all intellectual property protections on medicines.

#### The plan’s unilateral action by the WTO on medical IP undermines WHO legitimacy – forcing a perception of WHO action against patents is key to re-assert it – they say yes.

Rimmer 04, Matthew. "The race to patent the SARS virus: the TRIPS agreement and access to essential medicines." Melbourne Journal of International Law 5.2 (2004): 335-374. <https://law.unimelb.edu.au/__data/assets/pdf_file/0007/1681117/Rimmer.pdf> (BA (Hons), LLB (Hons) (Australian National University), PhD (New South Wales); Lecturer at ACIPA, the Faculty of Law, The Australian National University)//SidK + Elmer

The WHO has been instrumental in coordinating the international network of research on the SARS virus. It has emphasised the need for collaboration between the network participants. The WHO presented the containment of the SARS virus as ‘one of the biggest success stories in public health in recent years’.206 However, it **was less active in the debate over patent law** and public health epidemics. The 56th World Health Assembly considered the relationship between intellectual property, innovation and public health. It stressed that in order to tackle new public health problems with international impact, such as the emergence of severe acute respiratory syndrome (SARS), access to new medicines with potential therapeutic effect, and health innovations and discoveries should be universally available without discrimination.207 However, there was much disagreement amongst the member states as to what measures would be appropriate. The WHO has made a number of aspirational statements about patent law and access to essential medicines. Arguably, though, the organisation could be a much more informed and vocal advocate. Initially, the WHO did not view the patent issues related to SARS as being within its field of activities. The agency didnoteven seem aware of the patent proceedings, leaving individual research institutions without guidance. Spokesman Dick Thompson said: ‘What we care about is [that] the international collaboration continues to function. Patents, they don’t really concern us’.208 The director of WHO’s Global Influenza project, Klaus Stöhr, expressed his opinion that the patent filings would not interfere with the international cooperation on the SARS research: ‘I don’t think this will undermine the collaborative spirit of the network of labs’.209 However, he believed that, after the international network of researchers had identified the coronavirus, it was necessary to rely upon companies to commercialise such research. Klaus Stöhr conceded: ‘At a certain point of time you have to give way for competitive pharmaceutical companies’.210 On a policy front, the WHO remained deferential to the WTO over the debate over patent law and access to essential medicines, observing: Owing to the inconclusive nature of the studies conducted to date, and because of the effect that potentially significant price increases could have on access to drugs in poor countries, WHO is currently monitoring and evaluating the effects of TRIPS on the prices of medicines. It is also monitoring the TRIPS impact on other important issues such as transfer of technology, levels of research and development for drugs for neglected diseases, and the evolution of generic drug markets.211 In such a statement, the WHO appears diffident, unwilling to take on more than a spectator role. Such a position is arguably too timid, given the gravity of national emergencies, such as the SARS virus. The organisation could take a much stronger stance on the impact of the **TRIPS** Agreement on public health concerns. The WHO has since enunciated a position statement on the patenting of the SARS virus. A number of high ranking officials from the organisation have commented on the need to ensure that international research into the SARS virus is not impeded by competition over patents. Arguably though, the WHO **should not be limited to a mere spectator role in such policy discussions. It** needstoplay an active advocacy role in the debate over patent law and access to essential medicines. The WHO released a position statement on ‘Patent Applications for the SARS Virus and Genes’ on 29 May 2003.212 The organisation stressed that it had no per se objection to the patenting of the SARS virus: Some people have objected to the SARS patent applications on the ground that the virus and its genes should not be patentable because they are mere discoveries, not inventions. This distinction no longer prevents the granting of patents; the novel claim rests not with the virus itself but with its isolation, and likewise with the identification of the genetic sequence not its mere occurrence. Many patents have been issued on viruses and genetic sequences, though the appropriate policies to follow in such cases — particularly as genomic sequencing becomes more routine and less ‘inventive’ — remain matters of dispute.213 Furthermore, it recognised that public institutions could legitimately use patents as a defensive means to prevent undue commercial exploitation of the research: The “defensive” use of patents can be a legitimate part of researchers’ efforts to make their discoveries (and further discoveries derived therefrom) widely available to other researchers, in the best collaborative traditions of biomedical science.214 The WHO affirmed the need for further cooperation between research organisations in respect of the SARS virus: ‘For continued progress against SARS, it is essential that we nurture the spirit of the unprecedented, global collaboration that rapidly discovered the novel virus and sequenced its genome’.215 The WHO announced its intention to monitor the effects of patents (and patent applications) on the speed with which SARS diagnostic tests, treatments, and vaccines are developed and made available for use, and on the manner in which prices are set for these technologies. It observed: In the longer term, the manner in which SARS patent rights are pursued could have a profound effect on the willingness of researchers and public health officials to collaborate regarding future outbreaks of new infectious diseases. WHO will therefore examine whether the terms of reference for such collaborations need to be modified to ensure that the credit for any intellectual property developed is appropriately attributed, that revenues derived from licensing such property are devoted to suitable uses, and that legitimate rewards for innovative efforts do not impose undue burdens on efforts to make tests, therapies, and preventive measure available to all.216 It maintained that in order to tackle new public health problems with international impact, such as the emergence of severe acute respiratory syndrome (SARS), access to new medicines with potential therapeutic effect, and health innovations and discoveries should be universally available without discrimination.219 The Assembly requested that the Director-General continue to support Member States in the exchange and transfer of technology and research findings, according high priority to access to antiretroviral drugs to combat HIV/AIDS and medicines to control tuberculosis, malaria and other major health problems, in the context of paragraph 7 of the Doha Declaration which promotes and encourages technology transfer.220 The WHO also considered a report on the emergence of the SARS virus and the international response to the infectious disease.221 It was ‘deeply concerned that SARS ... poses a serious threat to global health security, the livelihood of populations, the functioning of health systems, and the stability and growth of economies’.222 The Committee on Infectious Diseases requested that the Director-General ‘mobilize global scientific research to improve understanding of the disease and to develop control tools such as diagnostic tests, drugs and vaccines that are accessible to and affordable by Member States’.223 The Director-General of the WHO, Dr Gro Harlem Brundtland, **told the World Health** Assembly that there was a need to build trust and forge solidarity in the face of public health epidemics: ‘**Ensuring that patent regimes stimulate research and do not hinder international scientific cooperation** is a critical challenge — whether the target is SARS or any other threat to human health’.224 Similarly, Dr Marie-Paule Kieny, Director of the WHO Initiative for Vaccine Research, said: If we are to develop a SARS vaccine more quickly than usual, we have to continue to work together on many fronts at once, on scientific research, intellectual property and patents issues, and accessibility. It is a very complicated process, involving an unprecedented level of international cooperation, which is changing the way we work.225 She emphasised that patents and intellectual property issues and their safeguards can help rather than hinder the rapid development of SARS vaccines and ensure that, once developed, they are available in both industrialised and developing countries.226 C Summary The WHO should play a much more active role in the policy debate over patent law and access to essential medicines. James Love, the director of the Consumer Project on Technology, run by Ralph Nader, is critical of the WHO statement on ‘Intellectual Property Rights, Innovation, and Public Health’.227 He maintains that the Assembly could have addressed ‘practical examples, like SARS’ and cites the report in The Washington Post that notes that a number of commercial companies are investing in SARS research.228 The non-government organisation Médecins Sans Frontières has been critical in the past of the passive role played by the WHO in the debate over access to essential medicines: ‘As the world’s leading health agency, and armed with the clear mandate of recent World Health Assembly resolutions, the WHO can and should **do much more’**.229 The WHO should become a vocal advocate for public health concerns at the WTO and its TRIPS Council — especially in relation to patent law and the SARS virus. It must staunchly defend the rights of member states to incorporate measures in their legislation that protect access to medicines — such as compulsory licensing, parallel imports, and measures to accelerate the introduction of generic pharmaceutical drugs. It needs to develop a clearer vision on global equity pricing for essential medicines. The race to patent the SARS virus seems to be an inefficient means of allocating resources. A number of public research organisations — including the BCCA, the CDC and HKU — were compelled to file patents in respect of the genetic coding of the SARS virus. Such measures were promoted as ‘defensive patenting’ — a means to ensure that public research and communication were not jeopardised by commercial parties seeking exclusive private control. However, there are important drawbacks to such a strategy. The filing of patents by public research organisations may be prohibitively expensive. It will also be difficult to resolve the competing claims between the various parties — especially given that they were involved in an international research network together. Seth Shulman argues that there is a need for international cooperation and communication in dealing with public health emergencies such as the SARS virus: The success of a global research network in identifying the pathogen is an example of the huge payoff that can result when researchers put aside visions of patents and glory for their individual laboratories and let their work behave more like, well, a virus. After all, the hallmark of an opportunistic virus like the one that causes SARS is its ability to spread quickly. Those mounting a response need to disseminate their information and innovation just as rapidly.230 There is a danger that such competition for patent rights may undermine trust and cooperation within the research network. Hopefully, however, such concerns could be resolved through patent pooling or joint ownership of patents. Furthermore, a number of commercial companies have filed patent applications in respect of research and development into the SARS virus. There will be a need for cooperation between the public and private sectors in developing genetic tests, vaccines, and pharmaceutical drugs that deal with the SARS virus. There is also a need to reform the patent system to deal with international collaborative research networks — such as that created to combat the SARS virus. Several proposals have been put forward. There has been a renewed debate over whether patents should be granted in respect of genes and gene sequences. Some commentators have maintained that the SARS virus should fall within the scope of patentable subject matter — to promote research and development in the field. However, a number of critics of genetic technology have argued that the SARS virus should not be patentable because it is a discovery of nature, and a commercialisation of life. There has been a discussion over the lack of harmonisation over the criteria of novelty and inventive step between patent regimes. As Peter Yu comments, ‘[w]hile [the] US system awards patents to those who are the first to invent, the European system awards patents to those who are the first to file an application’.231 There have been calls for the requirement of utility to be raised. There have also been concerns about prior art, secret use and public disclosure. Representative Lamar Smith of Texas has put forward the CREATE Act, which recognises the collaborative nature of research across multiple institutions. Such reforms are intended to ensure that the patent system is better adapted to deal with the global nature of scientific inquiry. The race to patent the SARS virus also raises important questions about international treaties dealing with access to essential medicines. The public health epidemic raises similar issues to other infectious diseases — such as AIDS, malaria, tuberculosis, influenza, and so forth. The WHO made a public statement about its position on the patenting of the SARS virus. It has stated that it will continue to monitor developments in this field. Arguably, there is a need for the WHO to play a larger role in the debate over patent law and access to essential medicines. Not only could it mediate legal disputes over patents in respect of essential medicines, it could be a vocal advocate in policy discussions. The WTO has also played an important role in the debate over patent law and access to essential medicines. A number of public interest measures could be utilised to secure access to patents relating to the SARS virus including compulsory licensing, parallel importation and research exceptions. The appearance of the SARS virus shows that there should be an open-ended interpretation of the scope of diseases covered by the Doha Declaration on the TRIPS Agreement and Public Health. Important lessons should be learned from the emergence of the SARS virus, and the threat posed to global health. As the World Health Report 2003 notes: SARS will not be the last new disease to take advantage of modern global conditions. In the last two decades of the 20th century, new diseases emerged at the rate of one per year, and this trend is certain to continue. Not all of these emerging infections will transmit easily from person to person as does SARS. Some will emerge, cause illness in humans and then disappear, perhaps to recur at some time in the future. Others will emerge, cause human illness and transmit for a few generations, become attenuated, and likewise disappear. And still others will emerge, become endemic, and remain important parts of our human infectious disease ecology.232 Already, in 2004, there have been worries that pharmaceutical drug companies and patent rights are impeding efforts to prevent an outbreak of bird flu — avian influenza.233 There is a need to ensure that the patent system is sufficiently flexible and adaptable to cope with the appearance of new infectious diseases.234

#### Consultation displays strong leadership, authority, and cohesion among member states which are key to WHO legitimacy

Gostin et al 15 [(Lawrence O., Linda D. & Timothy J. O’Neill Professor of Global Health Law at Georgetown University, Faculty Director of the O’Neill Institute for National & Global Health Law, Director of the World Health Organization Collaborating Center on Public Health Law & Human Rights, JD from Duke University) “The Normative Authority of the World Health Organization,” Georgetown University Law Center, 5/2/2015] JL

Members want the WHO to exert leadership, harmonize disparate activities, and set priorities. Yet they resist intrusions into their sovereignty, and want to exert control. In other words, ‘everyone desires coordination, but no one wants to be coordinated.’ States often ardently defend their geostrategic interests. As the Indonesian virus-sharing episode illustrates, the WHO is pulled between power blocs, with North America and Europe (the primary funders) on one side and emerging economies such as Brazil, China, and India on the other. An inherent tension exists between richer ‘net contributor’ states and poorer ‘net recipient’ states, with the former seeking smaller WHO budgets and the latter larger budgets. Overall, national politics drive self-interest, with states resisting externally imposed obligations for funding and action. Some political leaders express antipathy to, even distrust of, UN institutions, viewing them as bureaucratic and inefficient. In this political environment, it is unsurprising that members fail to act as shareholders. Ebola placed into stark relief the failure of the international community to increase capacities as required by the IHR. Guinea, Liberia and Sierra Leone had some of the world's weakest health systems, with little capacity to either monitor or respond to the Ebola epidemic.20 This caused enormous suffering in West Africa and placed countries throughout the region e and the world e at risk. Member states should recognize that the health of their citizens depends on strengthening others' capacity. The WHO has a central role in creating systems to facilitate and encourage such cooperation.

The WHO cannot succeed unless members act as shareholders, foregoing a measure of sovereignty for the global common good. It is in all states' interests to have a strong global health leader, safeguarding health security, building health systems, and reducing health inequalities. But that will not happen unless members fund the Organization generously, grant it authority and flexibility, and hold it accountable.

#### WHO is critical to disease prevention – it is the only international institution that can disperse information, standardize global public health, and facilitate public-private cooperation.

Murtugudde 20 [(Raghu, professor of atmospheric and oceanic science at the University of Maryland, PhD in mechanical engineering from Columbia University) “Why We Need the World Health Organization Now More Than Ever,” Science, 4/19/2020] JL

WHO continues to play an indispensable role during the current COVID-19 outbreak itself. In November 2018, the US National Academies of Sciences, Engineering and Medicine organised a workshop to explore lessons from past influenza outbreaks and so develop recommendations for pandemic preparedness for 2030. The salient findings serve well to underscore the critical role of WHO for humankind. The world’s influenza burden has only increased in the last two decades, a period in which there have also been 30 new zoonotic diseases. A warming world with increasing humidity, lost habitats and industrial livestock/poultry farming has many opportunities for pathogens to move from animals and birds to humans. Increasing global connectivity simply catalyses this process, as much as it catalyses economic growth. WHO coordinates health research, clinical trials, drug safety, vaccine development, surveillance, virus sharing, etc. The importance of WHO’s work on immunisation across the globe, especially with HIV, can hardly be overstated. It has a rich track record of collaborating with private-sector organisations to advance research and development of health solutions and improving their access in the global south. It discharges its duties while maintaining a dynamic equilibrium between such diverse and powerful forces as national securities, economic interests, human rights and ethics. COVID-19 has highlighted how political calculations can hamper data-sharing and mitigation efforts within and across national borders, and WHO often simply becomes a convenient political scapegoat in such situations. International Health Regulations, a 2005 agreement between 196 countries to work together for global health security, focuses on detection, assessment and reporting of public health events, and also includes non-pharmaceutical interventions such as travel and trade restrictions. WHO coordinates and helps build capacity to implement IHR.

#### Extinction – defense is wrong.

Piers Millett 17, Consultant for the World Health Organization, PhD in International Relations and Affairs, University of Bradford, Andrew Snyder-Beattie, “Existential Risk and Cost-Effective Biosecurity”, Health Security, Vol 15(4), http://online.liebertpub.com/doi/pdfplus/10.1089/hs.2017.0028

Historically, disease events have been responsible for the greatest death tolls on humanity. The 1918 flu was responsible for more than 50 million deaths,1 while smallpox killed perhaps 10 times that many in the 20th century alone.2 The Black Death was responsible for killing over 25% of the European population,3 while other pandemics, such as the plague of Justinian, are thought to have killed 25 million in the 6th century—constituting over 10% of the world’s population at the time.4 It is an open question whether a future pandemic could result in outright human extinction or the irreversible collapse of civilization. A skeptic would have many good reasons to think that existential risk from disease is unlikely. Such a disease would need to spread worldwide to remote populations, overcome rare genetic resistances, and evade detection, cures, and countermeasures. Even evolution itself may work in humanity’s favor: Virulence and transmission is often a trade-off, and so evolutionary pressures could push against maximally lethal wild-type pathogens.5,6 While these arguments point to a very small risk of human extinction, they do not rule the possibility out entirely. Although rare, there are recorded instances of species going extinct due to disease—primarily in amphibians, but also in 1 mammalian species of rat on Christmas Island.7,8 There are also historical examples of large human populations being almost entirely wiped out by disease, especially when multiple diseases were simultaneously introduced into a population without immunity. The most striking examples of total population collapse include native American tribes exposed to European diseases, such as the Massachusett (86% loss of population), Quiripi-Unquachog (95% loss of population), and theWestern Abenaki (which suffered a staggering 98% loss of population). In the modern context, no single disease currently exists that combines the worst-case levels of transmissibility, lethality, resistance to countermeasures, and global reach. But many diseases are proof of principle that each worst-case attribute can be realized independently. For example, some diseases exhibit nearly a 100% case fatality ratio in the absence of treatment, such as rabies or septicemic plague. Other diseases have a track record of spreading to virtually every human community worldwide, such as the 1918 flu,10 and seroprevalence studies indicate that other pathogens, such as chickenpox and HSV-1, can successfully reach over 95% of a population.11,12 Under optimal virulence theory, natural evolution would be an unlikely source for pathogens with the highest possible levels of transmissibility, virulence, and global reach. But advances in biotechnology might allow the creation of diseases that combine such traits. Recent controversy has already emerged over a number of scientific experiments that resulted in viruses with enhanced transmissibility, lethality, and/or the ability to overcome therapeutics.13-17 Other experiments demonstrated that mousepox could be modified to have a 100% case fatality rate and render a vaccine ineffective.18 In addition to transmissibility and lethality, studies have shown that other disease traits, such as incubation time, environmental survival, and available vectors, could be modified as well.19-2

## 6

#### Climate patents and innovation high now and solving warming but patent waivers set a dangerous precedent for appropriations - the mere threat is sufficient is enough to kill investment.

Brand 21, Melissa. “Trips Ip Waiver Could Establish Dangerous Precedent for Climate Change and Other Biotech Sectors.” IPWatchdog.com | Patents & Patent Law, 26 May 2021, www.ipwatchdog.com/2021/05/26/trips-ip-waiver-establish-dangerous-precedent-climate-change-biotech-sectors/id=133964/. //sid

The biotech industry is making remarkable advancestowards climate change solutions, and it is precisely for this reason that it can expect to be in the crosshairs of potential IP waiver discussions. President Biden is correct to refer to climate change as an existential crisis. Yet it does not take too much effort to connect the dots between President Biden’s focus on climate change and his Administration’s recent commitment to waive global IP rights for Covid vaccines (TRIPS IP Waiver). “This is a global health crisis, and the extraordinary circumstances of the COVID-19 pandemic call for extraordinary measures.” If an IP waiver is purportedly necessary to solve the COVID-19 global health crisis (and of course [we dispute this notion](https://www.ipwatchdog.com/2021/04/19/waiving-ip-rights-during-times-of-covid-a-false-good-idea/id=132399/)), can we really feel confident that this or some future Administration will not apply the same logic to the climate crisis? And, without the confidence in the underlying IP for such solutions, what does this mean for U.S. innovation and economic growth? United States Trade Representative (USTR) [Katherine Tai](https://www.ipwatchdog.com/2021/05/05/tai-says-united-states-will-back-india-southafrica-proposal-waive-ip-rights-trips/id=133224/) was subject to questioning along this very line during a recent Senate Finance Committee hearing. And while Ambassador Tai did not affirmatively state that an IP waiver would be in the future for climate change technology, she surely did not assuage the concerns of interested parties. The United States has historically supported robust IP protection. This support is one reason the United States is the center of biotechnology innovation and leading the fight against COVID-19. However, a brief review of the domestic legislation arguably most relevant to this discussion shows just how far the international campaign against IP rights has eroded our normative position. The Clean Air Act, for example, contains a provision allowing for the mandatory licensing of patents covering certain devices for reducing air pollution. Importantly, however, the patent owner is accorded due process and the statute lays out a detailed process regulating the manner in which any such license can be issued, including findings of necessity and that no reasonable alternative method to accomplish the legislated goal exists. Also of critical importance is that the statute requires compensation to the patent holder. Similarly, the Atomic Energy Act contemplates mandatory licensing of patents covering inventions of primary importance in producing or utilizing atomic energy. This statute, too, requires due process, findings of importance to the statutory goals and compensation to the rights holder. A TRIPS IP waiver would operate outside of these types of frameworks. There would be no due process, no particularized findings, no compensationand no recourse. Indeed, the fact that the World Trade Organization (WTO) already has a process under the TRIPS agreement to address public health crises, including the compulsory licensing provisions, with necessary guardrails and compensation, makes quite clear that the waiver would operate as a free for all. Forced Tech Transfer Could Be on The Table When being questioned about the scope of a potential TRIPS IP waiver, Ambassador Tai invoked the proverb “Give a man a fish and you feed him for a day. Teach a man to fish and you feed him for a lifetime.” While this answer suggests primarily that, in times of famine, the Administration would rather give away other people’s fishing rods than share its own plentiful supply of fish (here: actual COVID-19 vaccine stocks), it is apparent that in Ambassador Tai’s view waiving patent rights alone would not help lower- and middle-income countries produce their own vaccines. Rather, they would need to be taught how to make the vaccines and given the biotech industry’s manufacturing know-how, sensitive cell lines, and proprietary cell culture media in order to do so. In other words, Ambassador Tai acknowledged that the scope of the current TRIPS IP waiver discussions includes the concept of forced tech transfer. In the context of climate change, the idea would be that companies who develop successful methods for producing new seed technologies and sustainable biomass**,** reducing greenhouse gases in manufacturing and transportation, capturing and sequestering carbon in soil and products, and more, would be required to turn over their proprietaryknow-how to global competitors. While it is unclear how this concept would work in practice and under the constitutions of certain countries, the suggestion alone could be devastating to voluntary internationalcollaborations. Even if one could assume that the United States could not implement forced tech transfer on its own soil, what about the governments of our international development partners? It is not hard to understand that a U.S.-based company developing climate change technologies would be unenthusiastic about partnering with a company abroad knowing that the foreign country’s government is on track – with the assent of the U.S. government – to change its laws and seize proprietary materials and know-how that had been voluntarily transferred to the local company. Necessary Investment Could Diminish Developing climate change solutions is not an easy endeavor and bad policy positions threaten the likelihood that they will materialize. These products have long lead times from research and development to market introduction, owing not only to a high rate of failure but also rigorous regulatory oversight. Significant investment is required to sustain and drive these challenging and long-enduring endeavors. For example, synthetic biology companies critical to this area of innovation [raised over $1 billion in investment in the second quarter of 2019 alone](https://www.bio.org/sites/default/files/2021-04/Climate%20Report_FINAL.pdf). If investors cannot be confident that IP will be in place to protect important climate change technologies after their long road from bench to market, it is unlikely they will continue to investat the current and required levels**.**

#### Extinction.

Yangyang Xu and Ramanathan 17, Assistant Professor of Atmospheric Sciences at Texas A&M University; and Veerabhadran Ramanathan, Distinguished Professor of Atmospheric and Climate Sciences at the Scripps Institution of Oceanography, University of California, San Diego, 9/26/17, “Well below 2 °C: Mitigation strategies for avoiding dangerous to catastrophic climate changes,” Proceedings of the National Academy of Sciences of the United States of America, Vol. 114, No. 39, p. 10315-10323

We are proposing the following extension to the DAI risk categorization: warming greater than 1.5 °C as “dangerous”; warming greater than 3 °C as “catastrophic?”; and warming in excess of 5 °C as “unknown??,” with the understanding that changes of this magnitude, not experienced in the last 20+ million years, pose existential threats to a majority of the population. The question mark denotes the subjective nature of our deduction and the fact that catastrophe can strike at even lower warming levels. The justifications for the proposed extension to risk categorization are given below. From the IPCC burning embers diagram and from the language of the Paris Agreement, we infer that the DAI begins at warming greater than 1.5 °C. Our criteria for extending the risk category beyond DAI include the potential risks of climate change to the physical climate system, the ecosystem, human health, and species extinction. Let us first consider the category of catastrophic (3 to 5 °C warming). The first major concern is the issue of tipping points. Several studies (48, 49) have concluded that 3 to 5 °C global warming is likely to be the threshold for tipping points such as the collapse of the western Antarctic ice sheet, shutdown of deep water circulation in the North Atlantic, dieback of Amazon rainforests as well as boreal forests, and collapse of the West African monsoon, among others. While natural scientists refer to these as abrupt and irreversible climate changes, economists refer to them as catastrophic events (49). Warming of such magnitudes also has catastrophic human health effects. Many recent studies (50, 51) have focused on the direct influence of extreme events such as heat waves on public health by evaluating exposure to heat stress and hyperthermia. It has been estimated that the likelihood of extreme events (defined as 3-sigma events), including heat waves, has increased 10-fold in the recent decades (52). Human beings are extremely sensitive to heat stress. For example, the 2013 European heat wave led to about 70,000 premature mortalities (53). The major finding of a recent study (51) is that, currently, about 13.6% of land area with a population of 30.6% is exposed to deadly heat. The authors of that study defined deadly heat as exceeding a threshold of temperature as well as humidity. The thresholds were determined from numerous heat wave events and data for mortalities attributed to heat waves. According to this study, a 2 °C warming would double the land area subject to deadly heat and expose 48% of the population. A 4 °C warming by 2100 would subject 47% of the land area and almost 74% of the world population to deadly heat, which could pose existential risks to humans and mammals alike unless massive adaptation measures are implemented, such as providing air conditioning to the entire population or a massive relocation of most of the population to safer climates. Climate risks can vary markedly depending on the socioeconomic status and culture of the population, and so we must take up the question of “dangerous to whom?” (54). Our discussion in this study is focused more on people and not on the ecosystem, and even with this limited scope, there are multitudes of categories of people. We will focus on the poorest 3 billion people living mostly in tropical rural areas, who are still relying on 18th-century technologies for meeting basic needs such as cooking and heating. Their contribution to CO2 pollution is roughly 5% compared with the 50% contribution by the wealthiest 1 billion (55). This bottom 3 billion population comprises mostly subsistent farmers, whose livelihood will be severely impacted, if not destroyed, with a one- to five-year megadrought, heat waves, or heavy floods; for those among the bottom 3 billion of the world’s population who are living in coastal areas, a 1- to 2-m rise in sea level (likely with a warming in excess of 3 °C) poses existential threat if they do not relocate or migrate. It has been estimated that several hundred million people would be subject to famine with warming in excess of 4 °C (54). However, there has essentially been no discussion on warming beyond 5 °C. Climate change-induced species extinction is one major concern with warming of such large magnitudes (>5 °C). The current rate of loss of species is ∼1,000-fold the historical rate, due largely to habitat destruction. At this rate, about 25% of species are in danger of extinction in the coming decades (56). Global warming of 6 °C or more (accompanied by increase in ocean acidity due to increased CO2) can act as a major force multiplier and expose as much as 90% of species to the dangers of extinction (57). The bodily harms combined with climate change-forced species destruction, biodiversity loss, and threats to water and food security, as summarized recently (58), motivated us to categorize warming beyond 5 °C as unknown??, implying the possibility of existential threats. Fig. 2 displays these three risk categorizations (vertical dashed lines).

1. <http://dictionary.reference.com/browse/negate>, <http://www.merriam-webster.com/dictionary/negate>, <http://www.thefreedictionary.com/negate>, <http://www.vocabulary.com/dictionary/negate>, <http://www.oxforddictionaries.com/definition/english/negate> [↑](#footnote-ref-1)
2. *Dictionary.com – maintain as true, Merriam Webster – to say that something is true, Vocabulary.com – to affirm something is to confirm that it is true, Oxford dictionaries – accept the validity of, Thefreedictionary – assert to be true* [↑](#footnote-ref-2)
3. https://www.merriam-webster.com/dictionary/ought [↑](#footnote-ref-3)
4. <https://www.google.com/search?q=member+definition&rlz=1C1CHBF_enUS877US877&oq=member+definition&aqs=chrome.0.69i59j69i60l3.1863j0j7&sourceid=chrome&ie=UTF-8> //Xu [↑](#footnote-ref-4)
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6. <https://www.google.com/search?q=the+definition&rlz=1C1CHBF_enUS877US877&oq=the+definition&aqs=chrome..69i57j69i64j69i61j69i60l2.1976j0j7&sourceid=chrome&ie=UTF-8> //Xu [↑](#footnote-ref-6)
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8. <https://www.google.com/search?q=reduce+definition&rlz=1C1CHBF_enUS877US877&sxsrf=AOaemvI3lZsbmnXg5WHeL4m6rYGn8Vf6Aw%3A1630610232638&ei=OCMxYbCaJpO0tQb6wpGoCA&oq=reduce+definition&gs_lcp=Cgdnd3Mtd2l6EAMyCQgjECcQRhD5ATIECAAQQzIECAAQQzIFCAAQgAQyBQgAEIAEMgUIABCABDIFCAAQgAQyBQgAEIAEMgUIABCABDIFCAAQgAQ6BwgAEEcQsAM6BwgAELADEEM6BwgjEOoCECc6BAgjECc6BQgAEJECOhEILhCABBCxAxCDARDHARDRAzoKCAAQsQMQgwEQQzoHCAAQsQMQQzoICAAQgAQQsQM6CAgAELEDEIMBOgoIABCABBCHAhAUSgQIQRgAUMLMBFjS3QRgnt8EaAJwAngDgAG2A4gB-heSAQozLjExLjEuMi4xmAEAoAEBsAEKyAEKwAEB&sclient=gws-wiz&ved=0ahUKEwiwlru9gOHyAhUTWs0KHXphBIUQ4dUDCA8&uact=5> //Xu [↑](#footnote-ref-8)
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