### 1AC: ADV

#### The Advantage is Bioterrorism:

#### International Patent Laws are insufficient in the event of bioterrorism – compensation disputes and vague legal language cause massive delays in status quo compulsory licensing.

Mullowney and Harris 13 Mullowney, J., & Harris, N. (2013). Patent Protectability or Public Health?—An Examination of the Patent Compulsory License and Bioterrorism. Journal of Biosecurity, Biosafety, and Biodefense Law, 4(1). doi:10.1515/jbbbl-2012-0011 //sid

The compulsory license also comes with its drawbacks. This article has made frequent reference to timing issues, such as the swift need for a certain amount of cipro tablets after the anthrax attacks. In addition to the lack of defined guidelines to follow when determining a payment scheme under a compulsory license, both of these issues work in tandem. Article 31 of the TRIPS agreement states that the patent holder shall be paid “adequate remuneration” for the use of the compulsory license.94 Section 1498 of the United States Code provides that the patent holder may bring suit for “the recovery of his reasonable and entire compensation for such use and manufac- ture” under the license.95 From compulsory license jurisprudence, we know that a compulsory license is a taking under eminent domain,96 and that the patent holder is therefore entitled to just compensation97 based upon what he or she lost and not what the licensee gained.98 Aside from these two sources of the compulsory license, there are no other guidelines for determining recompense for the patent holder.99 Indeed, “[s]ection 1498 does not instruct a court on what method to use when computing ‘reasonable and entire compensation’ for the government’s taking of a compulsory license.”100 This leaves both the selection of payment method and the actual payment to the discretion of the courts.101 Currently, a popular method is to first look to see if an established royalty is applicable to the patent at issue.102 Without such an established royalty, then the courts will “retroactively construct a hypothetical ‘arms-length’ negotiation between a willing licensor and a willing licensee to determine the royalty rate upon which the parties would have agreed.”103 The closest thing American juris- prudence has to a set of guidelines to a compulsory license scheme is found in the “willing-buyer/willing-seller” approach, outlined in Georgia Pacific Corp. v. United States Plywood Corp., 318 F. Supp. 1116 (S.D.N.Y. 1970).104 The major drawbacks to this list of factors are the length of each factor and the number of factors (fifteen in total).105 Without a set of rigid guidelines and without a rigid rule for when a patent holder may bring suit to determine payment, we are left with a process that is “fraught with potential disputes as patentees could refuse to deal or resort to litigation if they thought a royalty unreasonable or inadequate.”106 If a patent holder sues over royalty amounts and delays the granting of a compulsory license, then the second problem becomes even clearer: in the situation of a bioterrorism attack or a national public health emergency, time is of the essence. Not only would the compensation disputes take up time, but under the TRIPS Agreement, parties are required (unless exempted) to make efforts to reach an agreement on a voluntary license.107 Furthermore, under TRIPS, a compulsory license is not to be granted until “such efforts have not been successful within a reasonable period of time.”108 Here, we run into the similar situation where “reasonable period of time” is not defined. It has been suggested that a reasonable period of time is anywhere from ninety days to six months.109 The timing problem, thus, becomes obvious: in the event of a bioterrorism attack or a public health emergency, waitingninety days to six months before granting a compulsory license is simply unreasonable. It appears, then, that the patent holder could bring suit for a better royalty determination or the patent holder could delay negotiations; either situation ultimately delays the issue of a compulsory license, potentially leaving the general public at risk of the effects of a bioterrorism attack. While it is unlikely that a pharmaceutical company would willingly delay negotiations, it should be noted that neither the United States Code nor the TRIPS Agreement sets out an express requirement that the negotiations be done in good faith.110

#### Compulsory Licensing clause in the TRIPS Act hurts Bioterrorism response:

#### 1] Definitional and Interpretational Problems

Oriola 1, Taiwo A. "Against the Plague: Exemption of Pharmaceutical Patent Rights as a Biosecurity Strategy." U. Ill. JL Tech. & Pol'y (2007): 287. (Senior Lecturer in Law at the University of Derby Law School)//Elmer

Given the TRIPS Agreement’s generous latitudes for pharmaceutical patent rights derogation—as exemplified by the national emergency, circumstances of extreme urgency, and the public health crises exceptions highlighted above—the case for a pharmaceutical patent appropriation clause in national and international patent regimes for bioterrorism crises situations would appear obtuse. However, the seemingly generous terms in which the “national emergency or circumstances of extreme urgency” exceptions are crafted arguably belie the concomitant conditionality and lurking political and economic externalities that are guaranteed to frustrate their usefulness in any bioterrorism scenario. a. Key Grounds for Waiver of Prior Authorization are Susceptible to Definitional and Interpretational Problems A major impediment to the effective use of the consent waiver provisions characteristically centers on the susceptibility of key terms to semantic and interpretational problems. For instance, while it might seem obvious, it is not inconceivable that a reluctant pharmaceutical right holder could contend that a bioterrorism attack was no more than a normal or non-extreme urgency situation, and that the invocation of compulsory licensure for procurement of critical medicines without prior consultation or authorization was premature. Furthermore, the usefulness of the “public non-commercial use”354 exception is equally dicey in the bioterrorism context, where it could only be availing if drugs were given gratis to victims. Even then, the possibility of elements of “commercial use” creeping into the transaction is very high indeed. This would be especially true if authorities used paid private contractors to distribute drugs to the populace, with a view to easing the burdens on public health officials and institutions or accelerating the distribution process in order to save as many lives as possible as quickly as possible. In such a scenario, the right holder could contend that it was not a “public non-commercial use” and that prior consent or negotiation was mandatory before the invocation of compulsory licensure, albeit in the bioterrorism context.355 Thus, the scenario allows “national emergency” or “circumstances of extreme urgency” and “public non-commercial use” exceptions to coalesce with tangled and complicated legal results.356 For example, authorities faced with a bioterrorism crisis, and intent on waiving prior authorization of pharmaceutical right holders, would have to decide whether to inform the right holders “as soon as reasonably practicable” (as required by the “national emergency” or “extreme urgency” exception) or “promptly”, (a la “public non-commercial use” grounds).357 These legal uncertainties could potentially hamstring the use of compulsory licensure for a bioterrorism-induced public health crisis.

#### 2] Lobbyists and Interest Groups – they deter usage of Compulsory Licensing under conditional clauses by exploitation bureaucratic red tape.

Oriola 2, Taiwo A. "Against the Plague: Exemption of Pharmaceutical Patent Rights as a Biosecurity Strategy." U. Ill. JL Tech. & Pol'y (2007): 287. (Senior Lecturer in Law at the University of Derby Law School)//Elmer

b. Economic and Political Expediencies as Impediments to the Usefulness of the Consent-Waiver Provisions of Article 31(b) of the TRIPS Agreement Another significant impediment to the propriety of the compulsory licensure regime in a bioterrorism context is the complex politics underpinning the political economy of international intellectual property rights. 358 The knowledge-based economy, 359 which has ridden the back of a strong intellectual property protection regime to a roaring success,360 seethes with interest groups, rent seekers, and free-riders, intensely battling for the soul of intellectual property.361 Interest groups with vested economic interests are adept at lobbying the political establishment, are better organized, and are able to dull authorities' political will to appropriate intellectual property rights for public good.362 In the United States, the political climate makes influence-peddling extremely easy for the pharmaceutical industry. For instance, the Pharmaceutical Research and Manufacturers of America reputedly contributed $3,505,052 in campaign funds to politicians in the run up to the 2002 elections in the United States. 63 Moreover, a 2005 report by the Center for Public Integrity claims that the pharmaceutical industry topped the list of lobbyists with a record $800 million in federal lobbying and campaign donations in the span of seven years.364 It is therefore unsurprising that the U.S. pharmaceutical industry is able to pressure the United States Trade Representative Office and Congress to resist a flexible interpretation of the TRIPS Agreement provisions on pharmaceutical patents by foreign governments.365 The industry has also become adept at co-opting the generics market, reputedly worth over $20 billion in the United States alone.3" Powerful right holders with vested interests and pro-intellectual property scholars tend to rationalize stronger intellectual property protection on utilitarian grounds,367 dismissing any suggestion at proportionality, balancing of rights, or rights derogation as a campaign against innovation368 or unsound public policy.3°9 This strand of scholarship or argument resonates well with the fundamentals of free market economies and underscores the apparent reluctance of the U.S. authorities to use compulsory licensing for Bayer's ciprofloxacin,3" despite the presence of compulsory licensure provisions in the Orphan Drug Act of 1983.'71 It is safe to say that authorities in the United States are more apt to use their eminent domain powers to appropriate land for real estate developers372 than pharmaceutical patents to secure affordable medicines for Americans.373 For instance, only eight out of more than two thousand new eminent domain cases filed in 2003-2004 involved intellectual property rights.374 Governments around the world have attempted to use compulsory licensure or have attempted to regulate pharmaceutical pricing.375 However, in the post-TRIPS era, such attempts are bound to be heavily criticized and met with stiff resistance from the pharmaceutical industry.376 For instance, in the pre-TRIPS era (1969-1987), Canada reined in drug prices and famously had some of the cheapest medicines in industrialized world for patented pharmaceuticals.377 The strategy purportedly saved the country an estimated US$211 million per year.378 It is extremely doubtful that Canada could re-enact its pre-TRIPS, laissez faire, pharmaceutical patent policy in the current regime of patents fencing. The U.S. Congress recently encountered difficulty on May 3, 2001, when it introduced the Affordable Prescription Drugs and Medical Inventions Act, a bill that was quite audacious in its quest to make patented drugs more affordable.379 Of note was section 158(d) of the bill, whose six grounds on licensing and remunerative terms for compulsorily licensure would have, if passed into law, revolutionized the drug access paradigm.38° Not surprisingly, the bill did not make it past the House of Representatives and never became law.381 The House was undaunted, however, and the bill, rechristened the "Public Health Emergency Medicines Act", was reintroduced in October 2005.382 Predictably, the new bill, like its predecessor, failed to become law.383 The pharmaceutical industry's power transcends the United States, and has been exerted, directly or by proxy, in nations such as Brazi1,3" South Africa,385 Canada,386 and the United Kingdom,387 to block unfavorable drug policy. In Britain, for instance, compulsory licensure and Crown Use could, in principle, be used to derogate from patent exclusivity.388 Great Britain was confronted with the imperatives of a restrictive drug pricing policy option when it introduced a national health insurance policy for the first time in 1911.389 By 1951, when free medical care was extended to the entire population, the number of prescriptions under the National Health Service had risen to 200 million, increasing government financial commitments, and precipitating an undue government preoccupation with price regulation, much to the chagrin of the pharmaceutical industry in post-World War II Great Britain.390 In the 1960s, the British government's attempt to grant compulsory licenses to generic-drug manufacturers became mired in litigation and was unsuccessful.391 Out of fifty applications submitted by generic manufacturers, only four were successful, due to the difficult legal procedures with which applicants had to comply.392 A similar situation occurred in Italy, where a constitutional challenge, mounted by the pharmaceutical industry to 1978 Italian legislation overriding pharmaceutical patents, was successfully upheld by the Constitutional Court. 9' Thus, while compulsory licensure may be legally and theoretically feasible in bioterrorism contexts, it runs against the grain of the free market and could be scuttled by economic and political expediencies that could potentially hamstring authorities' political will. An unconditional and unambiguous pharmaceutical patent appropriation clause is clearly necessary not only in the bioterrorism context, but in all situations where public health is threatened.

#### Bioterrorism is coming now – four warrants:

#### 1] Terrorist groups are looking for capabilities.

Dass 21 Reuben Ananthan Santhana Dass March 2021 "Bioterrorism: Counter Terrorist Trends and Analyses" Jstor (Research Analyst with the International Centre for Political Violence and Terrorism Research)//Elmer

Threat Assessment Several experts, including terrorism scholar Andrew Silke, have warned that the current pandemic “may lead to a resurgence in interest among terrorists for using such weapons.”51 This is partly due to the devastating impact of COVID-19, which highlights the lethality and potentially farreaching consequences of a bioterror attack involving a novel biological agent. Terrorist groups such as AQ and IS continue to retain an interest in using biological weapons. In a recent pro-AQ magazine published in November 2020 titled ‘Wolves of Manhattan’, AQ had called on its “wolves of Islam” to hand out “poisoned masks” to unsuspecting individuals in streets or stations.52 IS too recently released a poster titled ‘The Biological Terror’, via an online blog, which called on supporters to carry out attacks by spreading poison in food and at gatherings.53 Terrorist cells in Indonesia have planned poison attacks previously. In 2011, a militant cell in Jakarta planned to kill policemen by poisoning their food in a canteen using ricin.54 Five years later, another attempt was made by a terrorist cell in Indonesia to deliver cyanide-laced food to police officers.55 At the other end of the ideological spectrum, far-right groups have actively called on their members to exploit the novel coronavirus as a bio-weapon, urging infected members to spread the virus amongst Jews and minorities by hugging, coughing and contaminating currency notes.56 However, there have been little indications thus far that these calls have been adhered to by far-right elements.

#### 2] Lab diseases have historically had existential potential – new technology amplifies those risks.

Wan 20 Christopher Wan 3-25-2020 "Synthetic Biology and Existential Risk: A COVID-19 Thought Experiment" <https://medium.com/@chrisxwan/synthetic-biology-and-existential-risk-a-covid-19-thought-experiment-216d575271f1> (Law and Business at Stanford University)//Elmer

Existential risk Give me a lever long enough and a fulcrum on which to place it, and I shall move the world. — Archimedes I’ve been banging this drum for years: Technology is a force multiplier (a lever, if you will). New innovation is highly levered such that one person can produce increasing impact, both positive and negative. Once the lever gets long enough, however, certain existential risks enter the picture. According to Nick Bostrom, existential risks are those that threaten the premature extinction of intelligent life or the permanent and drastic destruction of its potential for desirable future development. Synthetic biology, in its current state today, is already one of them. In 2003, a lethal strain of the H5N1 avian flu broke onto the scene. The virus had a whopping fatality rate (# dead / # infected) of 60% (compare that with the 0.02% fatality rate of H1N1 and the approximately 1–3% fatality rate of COVID-19). Mortality was highest in people aged 10–19 years old and in young adults. Humanity’s saving grace, however, was that the virus was not virulent. According to the CDC, cases were “sporadic,” and fewer than 1,000 people got infected. Well, in 2012, researchers in Wisconsin and the Netherlands genetically engineered a separate strain of the H5N1 virus that was just as lethal, but now virulent. Some scientists called it “potentially the most lethal virus in history” (even moreso than the black plague, the Spanish flu, etc.,). Thankfully, these researchers were expert virologists who engineered only a small number of these virulent strains and took the upmost precaution in keeping these strains within the laboratory. Nobody has access to these strains, and no random person can re-create them. Or, at least for now.

#### 3] Dual use tech, DIY science, the internet, and expiring patent terms expand access to terrorist organizations.

Million-Perez, H. (2016). Addressing duel-use technology in an age of bioterrorism: Patent extensions to inspire companies making duel use technology to create accompanying countermeasures. AIPLA Quarterly Journal, 44(3), 387-436. Rachael Million-Perez is an associate with Fitzpatrick, Cella, Harper & Scinto and a graduate of the George Washington University Law School. //sid

Although we all benefit from the biotechnological revolution, people worldwide are challenged by the convergence of rapidly advancing science, progressive technology, and growing globalization. The global spread of biotechnological information and products affords malefactors the ability to proliferate bioweapons at leisure.48 Efforts to thwart access to chemical, nuclear, and biological weaponry have included the agreement on Trade Related Aspects of Intellectual Property Rights ("TRIPS") and the Invention Secrecy Act; both aim to sequester public access and accumulation of harmful substances.49 Unlike previous conventional weapons, "the collision of the biotech-nological [sic] revolution with globalization has the very real potential to create an unmanageable proliferation nightmare."50 Globalization has made weaponization of dual-use technologies more accessible. Globalization in trade, access to patent disclosures, and information sharing via the Internet each generate virtually limitless access to dual-use technology. In stark contrast to other conventional weapons (e.g., guns and grenades), dual-use technologies are not sequestered from public access.51 399 Rather, a dual-use technology, like most traded technology, enters the worldwide market.52 Additionally, rapidly approaching patent expirations exacerbate accessibility to dual-use technology.53 Upon the release of patented information, generic manufacturers will retail dual-use technology at lower cost and at higher 54 capacity. As a result, terrorist groups from around the world can easily proliferate any dual-use technologies available on the market.55 By either accessing the product directly or the information from the patent, any person or group can accumulate these technologies. 56 Readily available information from online forums affords terrorist organizations the ability to reverse engineer and manufacture dual-use technologies largely undetected.57 Unmonitored reverse engineering and manipulations of technologies by "scientists" has been called Do-it-Yourself ("DIY") science.58 The "scientists" of the DIY movement are known as "biohackers," a novel and unique breed of bioscience savants who conduct research from untraditional venues and with less than adequate means. 59 The DIY science movement began as a result of globalization, which led to decreased costs in lab equipment, order-ready materials, and boundless scientific information.60 Only in the last decade have governments come to realize the dilemma of biohackers in an agef of bioterrorism.61The realization seems meaningless, however, because government officials admit that the volume of dual-use technologies proliferated becomes impossible to determine or monitor over media like the Internet.62 Although some proponents call D1Y science a "democratization of science,"63 the practice puts unbridled scientific power in the hands of a broad base of individuals, which raises security and public health concerns. The government's greatest fear is that any individual will create, intentionally or otherwise, materials that harm others.65 An additional concern is that DIY labs lack competent peer review or institutional oversight.66 As a result, a blossoming DIY science community may unintentionally aid bioterrorists by providing them the benefits of shared information within the community and even cover for illicit activities, because most of the activities within the community are done within personally owned garages, basements, and sheds.67 In the wake of the D1Y science trend, it follows that dual-use technologies become more susceptible to reverse engineering for a harmful purpose. For instance, under the right conditions, an individual can grow botulinum toxin from home or clone the toxin in large quantities.68Regarding synthetic biology, "it is easy to imagine that dangerous genes or pathogens could be split into small inconspicuous oligonucleotides ordered via several dozen companies dispersed over the world and that could be assembled in a third-party laboratory."69 The relative simplicity of access, production, and utilization of dual-use technology, compared to other non-conventional weapons (e.g.,. weapons of mass destruction), further renders dual-use technology an important threat because these qualities attract terrorists who seek to inflict widespread casualties with minimal effort.70 For this reason, dual-use technologies require viable countermeasures.

#### 4] It’s uniquely feasible now – reject outdated defense – bio-engineering overcomes every obstacle.

Patel and D’Souza 20 Trushar R. Patel and Michael Hilary D'Souza 5-18-2020 "Coronavirus is not a bioweapon — but bioterrorism is a real future threat" (Trushar R. Patel receives funding from the Canada Research Chair Program. Michael Hilary D'Souza receives funding from Canada Research Chair Program in conjunction with Trushar Patel. Partners)//Elmer

Opportunity and expertise The feasibility of designing and dispersing biological weapons varies in difficulty depending on the biological agent in question. For instance, Bacillus anthracis, an exceptionally deadly and versatile pathogenic bacterium that causes the disease anthrax, is naturally occurring in the environment and can infect humans and animals. Anthrax has recently emerged from thawing permafrost due to the effects of climate change, and manages to persist in harsh climates and environments demonstrating its versatility. Acquiring anthrax is relatively easy and its highly infectious spores can enter the body through inhalation of aerosols or ingestion via contaminated water supplies. Consequently, anthrax is considered one of the leading potential bioweapons. In 2001, five people in the United States died after receiving mail contaminated with anthrax — no one was caught or charged. Conversely, the employment of synthetic biology to engineer novel bioweapons from pre-existing pathogens using CRISPR or DNA synthesis is far more demanding in terms of laboratory requirements and expertise. The manipulation and handling of these agents have been made more accessible by biotechnology companies competing aggressively for the attention of academic, corporate and government funding. With strict deadlines and finite resources, researchers value methods that provide reproducible and reliable results. This has been especially encouraging for the development of new technologies like CRISPR, whose competitive market has made gene-editing accessible and cost effective. Researchers have also supplemented their laboratories 3D-printed equipment, making complex instruments that were once costly and out-of-reach easily accessible to anyone interested in biotechnology. This allows the convenient development of weapons to occur anywhere from stringent, regulated laboratories to remote facilities and even in one’s own garage. While countries like the U.S. and Russia inherited advanced biological weapons programmes from the Cold War, rogue nations like North Korea and terrorist organisations like al-Qaida are actively seeking to develop programs and infrastructure for their own use and deterrence against foreign interference. With easily obtainable and simple technologies, the ability to invest in an underground bioweapons program is widely available. All that is necessary to bridge the gap is talent. A common myth appears to exemplify terrorist members as being uneducated individuals. However, at its peak, the Islamic State of Iraq and the Levant (ISIS) recruited a variety of educated professionals ranging from engineers to medical doctors. ISIS operated in the Middle East as any nation state would, with municipal bureaucracies, tax collection, road-building, infrastructural developments and hospitals. Terrorist organizations tend to have the same infrastructural and scientific capabilities as modern industrial nations, allowing them to potentially develop biochemical arsenals. The infrastructure requirements for biological weapons programs are also made easier by being comparatively cheaper and more versatile than a nuclear arsenal. This is largely because they can be masked by developments in medical industry, health and agricultural research.

#### Bioterrorism causes Extinction – overcomes any conventional defense.

Walsh 19, Bryan. End Times: A Brief Guide to the End of the World. Hachette Books, 2019. (Future Correspondent for Axios, Editor of the Science and Technology Publication OneZero, Former Senior and International Editor at Time Magazine, BA from Princeton University)//Elmer

I’ve lived through disease outbreaks, and in the previous chapter I showed just how unprepared we are to face a widespread pandemic of flu or another new pathogen like SARS. But a deliberate outbreak caused by an engineered pathogen would be far worse. We would face the same agonizing decisions that must be made during a natural pandemic: whether to ban travel from affected regions, how to keep overburdened hospitals working as the rolls of the sick grew, how to accelerate the development and distribution of vaccines and drugs. To that dire list add the terror that would spread once it became clear that the death and disease in our midst was not the random work of nature, but a deliberate act of malice. We’re scared of disease outbreaks and we’re scared of terrorism—put them together and you have a formula for chaos. As deadly and as disruptive as a conventional bioterror incident would be, an attack that employed existing pathogens could only spread so far, limited by the same laws of evolution that circumscribe natural disease outbreaks. But a virus engineered in a lab to break those laws could spread faster and kill quicker than anything that would emerge out of nature. It can be designed to evade medical countermeasures, frustrating doctors’ attempts to diagnose cases and treat patients. If health officials manage to stamp out the outbreak, it could be reintroduced into the public again and again. It could, with the right mix of genetic traits, even wipe us off the planet, making engineered viruses a genuine existential threat. And such an attack may not even be that difficult to carry out. Thanks to advances in biotechnology that have rapidly reduced the skill level and funding needed to perform gene editing and engineering, what might have once required the work of an army of virologists employed by a nation-state could soon be done by a handful of talented and trained individuals. Or maybe just one. When Melinda Gates was asked at the South by Southwest conference in 2018 to identify what she saw as the biggest threat facing the world over the next decade, she didn’t hesitate: “A bioterrorism event. Definitely.”2 She’s far from alone. In 2016, President Obama’s director of national intelligence James Clapper identified CRISPR as a “weapon of mass destruction,” a category usually reserved for known nightmares like nuclear bombs and chemical weapons. A 2018 report from the National Academies of Sciences concluded that biotechnology had rewritten what was possible in creating new weapons, while also increasing the range of people capable of carrying out such attacks.3 That’s a fatal combination, one that plausibly threatens the future of humanity like nothing else. “The existential threat that would be most available for someone, if they felt like doing something, would be a bioweapon,” said Eric Klien, founder of the Lifeboat Foundation, a nonprofit dedicated to helping humanity survive existential risks. “It would not be hard for a small group of people, maybe even just two or three people, to kill a hundred million people using a bioweapon. There are probably a million people currently on the planet who would have the technical knowledge to pull this off. It’s actually surprising that it hasn’t happened yet.”

#### Uncertainty of capabilities is not defense but reason to prefer a focus on preventing Bioterrorism – there’s a 50% chance the next attack is existential.

Millett and Beattie 17, Piers, and Andrew Snyder-Beattie. "Existential risk and cost-effective biosecurity." Health security 15.4 (2017): 373-383. (Senior Research Fellow at the Future of Humanity Institute, where he focuses on pandemic and deliberate disease)//Elmer

Why Uncertainty Is Not Cause for Reassurance Each of our estimates rely to some extent on guesswork and remain highly uncertain. Technological breakthroughs in areas such as diagnostics, vaccines, and therapeutics, as well as vastly improved surveillance, or even eventual space colonization, could reduce the chance of disease-related extinction by many orders of magnitude. Other breakthroughs such as highly distributed DNA synthesis or improved understanding of how to construct and modify diseases could increase or decrease the risks. Destabilizing political forces, the breakdown of the Biological Weapons Convention, or warfare between major world powers could vastly increase the amount of investment in bioweapons and create the incentives to actively use knowledge and biotechnology in destructive ways. Each of these factors suggests that our wide estimates could still be many orders of magnitude off from the true risk in this century. But uncertainty is not cause for reassurance. In instances where the probability of a catastrophe is thought to be extremely low (eg, human extinction from bioweapons), greater uncertainty around the estimates will typically imply greater risk of the catastrophe, as we have reduced confidence that the risk is actually at a low level.48 §§§ Given that our conservative models are based on historical data, they fail to account for the primary source of future risk: technological development that could radically democratize the ability to build advanced bioweapons. If the cost and required expertise of developing bioweapons falls far enough, the world might enter a phase where offensive capabilities dominate defensive ones. Some scholars, such as Martin Rees, think that humanity has about a 50% chance of going extinct due in large part to such technologies.49 However, incorporating these intuitions and technological conjectures would mean relying on qualitative arguments that would be far more contentious than our conservative estimates. We therefore proceed to assess the cost-effectiveness on the basis of our conservative models, until superior models of the risk emerge.

### 1AC: Plan

#### Text: The member nations of the World Trade Organization ought to reduce intellectual property protections for medicines by implementing an unconditional bio-terrorism-specific pharmaceutical patent appropriation clause.

* Modify it to clarify vagueness concerns

Mullowney and Harris 13 Mullowney, J., & Harris, N. (2013). Patent Protectability or Public Health?—An Examination of the Patent Compulsory License and Bioterrorism. Journal of Biosecurity, Biosafety, and Biodefense Law, 4(1). doi:10.1515/jbbbl-2012-0011 //sid

Therefore, in order to grant a compulsory license, the following elements should all be present: (1) the granting of the license is in response to a bona fide, declared national emergency; (2) the compulsory license shall be granted only if preexisting measures are not sufficient, and sufficiency cannot be met by the patent holder alone; (3) the government compensates the patent holder under either (A) a sliding scale method, or (B) a flat-rate method; and (4) the compul- sory license shall be granted until the national emergency is no longer declared, or the situation immediately giving rise to the declaration of a national emergency has dissipated, whichever is sooner. 4.1 The granting of the license is in response to a bona fide, declared national emergency Compulsory licenses should certainly not be ignored during a national emer- gency.133 On the same note, compulsory licenses should not be considered in any but the most extreme of situations. By requiring that the compulsory license be granted under the condition that a national emergency has been declared, the patent holder is protected from frivolous compulsory licenses being granted. This secures that the patent holder’s intellectual property rights will remain intact, at the very least, in all but the most extreme of situations. This element is not sufficient to the granting of a compulsory license, but is certainly necessary. The following factor further secures the patent holder’s intellectual property rights. 4.2 The compulsory license shall be granted only if pre-existing measures are not sufficient and sufficiency cannot be met by the patent holder alone This element is twofold. First, the government must discern whether or not current measures will be enough to satisfy the demand of whatever patented product they are looking to license. To use a pharmaceutical example, the government should look to see if there is enough medicine in the national stockpile to cover the requisite number of citizens. If there are, then the com- pulsory license should therefore not be granted. Second, if current counter- measures are not sufficient, the government must determine whether the patent holder will be able to fulfill the government’s desired quota. If so, then the compulsory license should not be granted. If, however, the patent holder alone cannot reach the government’s quota in a sufficient amount of time (as determined by the government), then the compulsory license should be granted. Any bad faith time estimates on behalf of the patent holder in an attempt to dissuade the granting of a compulsory license should be treated as automatic waiver of this condition, and the government should grant the compulsory license. 4.3 The government compensates the patent holder under either (A) a sliding scale method, or (B) a flat-rate method Under the sliding-scale method, the government must determine how long the patent has been active, how much it costs to manufacture each particular patented product, and how much the generic version of each particular patented product would sell for. Patents are valid for 20 years. However, in the case of a compulsory license, the starting point for the first determination should begin at the time the patent product was manufactured and actually placed into the market. From there, the government should determine how much longer the patent will be valid. This is the sliding scale. If the patent has 90% of its life remaining, then the compensation will be 90% of the rate determined. If the patent has 30% of its life remaining, then the compensation will be 30% of the rate determined, etc. Under this specific scheme, the government should combine both the price of manufacture for one product under the patent and how much the patent holder could expect to receive were it to sell a generic version of its product. For example, if it costs $0.50 to manufacture a single tablet of a medicine and the generic version would cost $1.00 per tablet, then the starting number would be $1.50 and would be adjusted according to how long the patent will remain valid. The sliding scale method might not be popular, but it assumes that the longer a patent has been active, the more likely it is that the research and development costs have been returned. Under a fixed-rate method, the government would simply pay the patent holder a flat rate based on the patent holder’s cost of manufacturing one of the patented products, the cost of a generic version of one of the The flat rate can be negotiable, but only after the license has been granted. Furthermore, the amount paid should be reduced by any amount that the patent holder earns should it enter the market with its own generic version. Under either situation, the patent holder would retain its right to bring suit against the government for an adjustment in compensation once the compulsory license has been granted. 4.4 The compulsory license shall be granted until the national emergency is no longer declared, or the situation immediately giving rise to the declaration of a national emergency has dissipated, whichever is sooner This ensures that the compulsory license is temporary. It further protects against the government keeping a compulsory license active indefinitely by requiring that the license be revoked either when the national emergency is no longer declared, or the situation immediately giving rise to the emergency is gone. This means that if there is a sufficient scare of a bioterrorism attack, a national emergency is declared, and a compulsory license is granted, if enough time has elapsed that there is no longer a scare of an imminent bioterrorism attack, then the license must be revoked. This ensures that the patent holder will not permanently lose his patent product. 5 Conclusion Bioterrorism is a legitimate concern in the United States. As such, numerous countermeasures have already been enacted attempting to ensure that American Citizens are adequately protected in the event of a biological attack. However, nothing can ever be certain, and it is unknown whether current countermeasures will be sufficient against any particular bioterrorism attack. One countermeasure that has received both praise and criticism is the compulsory license of a patent. In the event of a bioterrorism attack, the compulsory license should not be ignored. However, it should not be freely granted, either, and should only be granted under the following conditions: (1) the granting of the license is in response to a bona fide, declared national emergency; (2) the compulsory license shall be granted only if pre-existing measures are not sufficient and sufficiency cannot be met by the patent holder alone; (3) the government compensates the patent holder under either (A) a sliding scale method, or (B) a flat-rate method; and (4) the compulsory license shall be granted until the national emergency is no longer declared, or the situation immediately giving rise to the declaration of a national emergency has dissipated, whichever is sooner. This not only ensures that American Citizens are adequately protected, from biological attack, but also ensures that the intellectual property rights of the patents holder are likewise protected.

#### Here are the conditions in which the Aff is triggered

Resnik 4 David B. Resnik May 2004 "Terrorism and Intellectual Property Rights" <https://journalofethics.ama-assn.org/article/terrorism-and-intellectual-property-rights/2004-05> (an American bioethicist who works at the National Institute of Environmental Health Sciences)//Elmer

DeVille and I argued that the anthrax attacks did not meet these stringent conditions for overriding IPRs. We claimed that the main problem with overriding a patent in the anthrax attacks was that these threats did not constitute a national emergency because not very many people were affected, and no significant risk of an anthrax epidemic resulted from these attacks [10]. One might reasonably ask, however, "What would count as a national emergency significant enough to justify overriding IPRs?" To answer this question, one needs to consider the following: The magnitude of the harms to individuals or society, including mortality, morbidity, economic damages, and social disruption; The probability of the harms; The preventability of the harms (are they even preventable?); and The need to act soon to prevent the harms. If the magnitude, probability, and preventability of harms are high, and there is a need to act soon, then this would constitute a national emergency sufficient to justify overriding IPRs. In the absence of clear case, it is hard to think of an example that would fulfill conditions (1)-(4). However, the following situations might qualify: A terrorist attack using a highly contagious agent, such as smallpox, ebola, or the plague; A terrorist attack using a genetically engineered pathogen designed to overcome barriers to transmission, vaccines, or natural immunities; A terrorist attack aimed at thousands or millions of people with a highly effective delivery system, such as a mass mailing of weaponized anthrax spores or biological or chemical contamination of the food or water supply; A terrorist attack aimed at the government, public utilities, communications, or the public health infrastructure. Physicians and medical researchers have an obligation to provide important information and expertise concerning any decision to override IPRs in response to a bioterror incident or threat. They should help evaluate the magnitude and scope of the incident or threat, its public health impact, and the treatments, tests, or methods needed to promote health and safety. Policy makers can use this knowledge to decide whether it is appropriate to override IPRs to prevent or mitigate a national emergency.

### 1AC: FW

#### The standard is maximizing expected well-being. Prefer –

#### 1] Naturalism – Only material realities are epistemically accessible

Papineau ‘07

David Papineau, “Naturalism”. Stanford Encyclopedia of Philosophy, 2007//KOHS-AG

Moore took this argument to show that moral facts comprise a distinct species of non-natural fact. However, any such non-naturalist view of morality faces immediate difficulties, deriving ultimately from the kind of causal closure thesis discussed above. If all physical effects are due to a limited range of natural causes, and if **moral facts lie outside** this range, **then** it follow that **moral facts can never make any difference to what happens in the physical world**. (Harman, 1986) At first sight this may seem tolerable (perhaps moral facts indeed don't have any physical effects). But it has very awkward epistemological consequences. For beings like us, **knowledge** of the spatiotemporal world **is mediated by physical processes** **involving our** sense organs and **cognitive systems**. If moral facts cannot influence the physical world, then it is hard to see how we can have any knowledge of them.

#### Pleasure is an intrinsic good—solves regress.

Moen ’16 – (Ole Martin, PhD, Research Fellow in Philosophy @ University of Oslo, "An Argument for Hedonism." Journal of Value Inquiry 50.2 (2016): 267). Modified for glang

Let us start by observing, empirically, that a widely shared judgment about intrinsic value and disvalue is that pleasure is intrinsically valuable and pain is intrinsically disvaluable. On virtually any proposed list of intrinsic values and disvalues (we will look at some of them below), pleasure is included among the intrinsic values and pain among the intrinsic disvalues. This inclusion makes intuitive sense, moreover, for there is something undeniably good about the way pleasure feels and something undeniably bad about the way pain feels, and neither the goodness of pleasure nor the badness of pain seems to be exhausted by the further effects that these experiences might have. “Pleasure” and “pain” are here understood inclusively, as encompassing anything hedonically positive and anything hedonically negative. 2 The special value statuses of pleasure and pain are manifested in how we treat these experiences in our everyday reasoning about values. If you tell me that you are heading for the convenience store, I might ask: “What for?” This is a reasonable question, for when you go to the convenience store you usually do so, not merely for the sake of going to the convenience store, but for the sake of achieving something further that you deem to be valuable. You might answer, for example: “To buy soda.” This answer makes sense, for soda is a nice thing and you can get it at the convenience store. I might further inquire, however: “What is buying the soda good for?” This further question can also be a reasonable one, for it need not be obvious why you want the soda. You might answer: “Well, I want it for the pleasure of drinking it.” If I then proceed by asking “But what is the pleasure of drinking the soda good for?” the discussion is likely to reach an awkward end. The reason is that the pleasure is not good for anything further; it is simply that for which going to the convenience store and buying the soda is good. 3 As Aristotle observes: “We never ask what her~~is~~ end is in being pleased, because we assume that pleasure is choice worthy in itself.”4 Presumably, a similar story can be told in the case of pains, for if someone says “This is painful!” we never respond by asking: “And why is that a problem?” We take for granted that if something is painful, we have a sufficient explanation of why it is bad. If we are onto something in our everyday reasoning about values, it seems that pleasure and pain are both places where we reach the end of the line in matters of value. Although pleasure and pain thus seem to be good candidates for intrinsic value and disvalue, several objections have been raised against this suggestion: (1) that pleasure and pain have instrumental but not intrinsic value/disvalue; (2) that pleasure and pain gain their value/disvalue derivatively, in virtue of satisfying/frustrating our desires; (3) that there is a subset of pleasures that are not intrinsically valuable (so-called “evil pleasures”) and a subset of pains that are not intrinsically disvaluable (so-called “noble pains”), and (4) that pain asymbolia, masochism, and practices such as wiggling a loose tooth render it implausible that pain is intrinsically disvaluable. I shall argue that these objections fail.

#### Outweighs –

A] Other FWs rely on long questionable claims that make them less likely. Only util is epistemically accessible.

B] History – Thousands of years of debating haven’t settled ethical questions, so presume util since there’s good in making the world a better place

#### 2] States must use util – they seek practical benefits for constituents and aren’t unified agents so they don’t have intentions. No calc indicts since states use util successfully all the time and they just prove util’s hard to use not impossible.

#### 3] Death outweighs – agents can’t act ethically if they fear bodily harm – turns NCs

#### 4] Extinction comes first under any framing – future value, magnitude, risk parity

Pummer 15 Theron, Junior Research Fellow in Philosophy at St. Anne's College, University of Oxford. “Moral Agreement on Saving the World” Practical Ethics, University of Oxford. May 18, 2015 AT, recut BWSEK

There appears to be lot of disagreement in moral philosophy. Whether these many apparent disagreements are deep and irresolvable, I believe there is at least one thing it is reasonable to agree on right now, whatever general moral view we adopt: that it is very important to reduce the risk that all intelligent beings on this planet are eliminated by an enormous catastrophe, such as a nuclear war. How we might in fact try to reduce such existential risks is discussed elsewhere. My claim here is only that we – whether we’re consequentialists, deontologists, or virtue ethicists – should all agree that we should try to save the world. According to consequentialism, we should maximize the good, where this is taken to be the goodness, from an impartial perspective, of outcomes. Clearly one thing that makes an outcome good is that the people in it are doing well. There is little disagreement here. If the happiness or well-being of possible future people is just as important as that of people who already exist, and if they would have good lives, it is not hard to see how reducing existential risk is easily the most important thing in the whole world. This is for the familiar reason that there are so many people who could exist in the future – there are trillions upon trillions… upon trillions. There are so many possible future people that reducing existential risk is arguably the most important thing in the world, even if the well-being of these possible people were given only 0.001% as much weight as that of existing people. Even on a wholly person-affecting view – according to which there’s nothing (apart from effects on existing people) to be said in favor of creating happy people – the case for reducing existential risk is very strong. As noted in this seminal paper, this case is strengthened by the fact that there’s a good chance that many existing people will, with the aid of life-extension technology, live very long and very high quality lives. You might think what I have just argued applies to consequentialists tendency only. There is a to assume that, if an argument appeals to consequentialist considerations (the goodness of outcomes), it is irrelevant to non-consequentialists. But that is a huge mistake. Non-consequentialism is the view that there’s more that determines rightness than the goodness of consequences or outcomes; it is not the view that the latter don’t matter. Even John Rawls wrote, “All ethical doctrines worth our attention take consequences into account in judging rightness. One which did not would simply be irrational, crazy.” Minimally plausible versions of deontology and virtue ethics must be concerned in part with promoting the good, from an impartial point of view. They’d thus imply very strong reasons to reduce existential risk, at least when this doesn’t significantly involve doing harm to others or damaging one’s character. What’s even more surprising, perhaps, is that even if our own good (or that of those near and dear to us) has much greater weight than goodness from the impartial “point of view of the universe,” indeed even if the latter is entirely morally irrelevant, we may nonetheless have very strong reasons to reduce existential risk. Even egoism, the view that each agent should maximize her own good, might imply strong reasons to reduce existential risk. It will depend, among other things, on what one’s own good consists in. If well-being consisted in pleasure only, it is somewhat harder to argue that egoism would imply strong reasons to reduce existential risk – perhaps we could argue that one would maximize her expected hedonic well-being by funding life extension technology or by having herself cryogenically frozen at the time of her bodily death as well as giving money to reduce existential risk (so that there is a world for her to live in!). I am not sure, however, how strong the reasons to do this would be. But views which imply that, if I don’t care about other people, I have no or very little reason to help them are not even minimally plausible views (in addition to hedonistic egoism, I here have in mind views that imply that one has no reason to perform an act unless one actually desires to do that act). To be minimally plausible, egoism will need to be paired with a more sophisticated account of well-being. To see this, it is enough to consider, as Plato did, the possibility of a ring of invisibility – suppose that, while wearing it, Ayn could derive some pleasure by helping the poor, but instead could derive just a bit more by severely harming them. Hedonistic egoism would absurdly imply she should do the latter. To avoid this implication, egoists would need to build something like the meaningfulness of a life into well-being, in some robust way, where this would to a significant extent be a function of other-regarding concerns (see chapter 12 of this classic intro to ethics). But once these elements are included, we can (roughly, as above) argue that this sort of egoism will imply strong reasons to reduce existential risk. Add to all of this Samuel Scheffler’s recent intriguing arguments (quick podcast version available here) that most of what makes our lives go well would be undermined if there were no future generations of intelligent persons. On his view, my life would contain vastly less well-being if (say) a year after my death the world came to an end. So obviously if Scheffler were right I’d have very strong reason to reduce existential risk. We should also take into account moral uncertainty. What is it reasonable for one to do, when one is uncertain not (only) about the empirical facts, but also about the moral facts? I’ve just argued that there’s agreement among minimally plausible ethical views that we have strong reason to reduce existential risk – not only consequentialists, but also deontologists, virtue ethicists, and sophisticated egoists should agree. But even those (hedonistic egoists) who disagree should have a significant level of confidence that they are mistaken, and that one of the above views is correct. Even if they were 90% sure that their view is the correct one (and 10% sure that one of these other ones is correct), they would have pretty strong reason, from the standpoint of moral uncertainty, to reduce existential risk. Perhaps most disturbingly still, even if we are only 1% sure that the well-being of possible future people matters, it is at least arguable that, from the standpoint of moral uncertainty, reducing existential risk is the most important thing in the world. Again, this is largely for the reason that there are so many people who could exist in the future – there are trillions upon trillions… upon trillions. (For more on this and other related issues, see this excellent dissertation). Of course, it is uncertain whether these untold trillions would, in general, have good lives. It’s possible they’ll be miserable.

#### 5] Consequentialism true –

A] No intent-foresight distinction – when I foresee something it enters into my intention

B] No act-omission distinction – omitting is just choosing not to take any other action

C] Necessary enablers – If I ought to mow the lawn, then I ought to turn on the lawnmower. The consequence of that action is being able to mow to lawn

D] You can only evaluate if you’ve achieved their FW by looking at the consequences of it