# Yale Trad NC

**I strongly negate that the member nations of the World Trade Organization ought to reduce intellectual property protections for medicines.**

**Framework**

The value is **morality** and the value criterion is **utilitarianism**, defined as maximizing pleasure and minimizing pain through the consequences of actions. Prefer utilitarianism for the following reasons:

**1. Utilitarianism is a prerequisite to other frameworks**

You can’t evaluate philosophy if you're dead or suffering, we must do util before we consider other framings.

**2. According to**

**Moen 15 ,**

(Ole Martin Moen: Post-Doctoral Fellow in Philosophy at Centre for the Study of Mind in Nature, University of Oslo. “An Argument for Hedonism” [[http://www.olemartinmoen.com/wp-content/uploads/AnArgumentForHedonism.pdf](https://slack-redir.net/link?url=http%253A%252F%252Fwww.olemartinmoen.com%252Fwp-content%252Fuploads%252FAnArgumentForHedonism.pdf)] )

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 [is] good about** the way **pleasure** feels and something **[and] undeniably [is] bad about** the way **pain** feels, and **neither** the goodness of pleasure nor the badness of pain seems to be **[are]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 [a man] what his 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.He continues

**3. Moral uncertainty means any risk of extinction outweighs under any framework**

**Bostrom 13**

Nick. "Existential risk prevention as global priority." Global Policy 4.1 (2013): 15-31. (Faculty of Philosophy and Oxford Martin School University of Oxford)// Elmer recut by SHS/JS

These reflections on moral uncertainty suggest an alternative, complementary way of looking at existential risk; they also suggest a new way of thinking about the ideal of sustainability. Let me elaborate. Our present understanding of axiology might well be confused. **We may not now know — at least not in concrete detail — what outcomes would count as a big win for humanity**; we might not even yet be able to imagine the best ends of our journey. If we are indeed profoundly uncertain about our ultimate aims, then we should recognize that there is a great option value in preserving — and ideally improving — our ability to recognize value and to steer the future accordingly. **Ensuring that there will be a future version of humanity** with great powers and a propensity to use them wisely **is plausibly the best way available to us to increase the probability that the future will contain a lot of value. To do this, we must prevent any existential catastrophe**.

**With that, let’s move to the case.**

**Contention 1- Medicine Safety**

**The first contention will prove that a reduction of IPR’s lead to higher production and circulation of counterfeit medications.**

**Mercurio 21:**

Mercurio, Bryan [the Simon F.S. Li Professor of Law at the Chinese University of Hong Kong (CUHK), having served as Associate Dean (Research) from 2010-14 and again from 2017-19. Professor Mercurio specialises in international economic law (IEL), with particular expertise in the intersection between trade law and intellectual property rights, free trade agreements, trade in services, dispute settlement and increasingly international investment law] “WTO Waiver from Intellectual Property Protection for COVID-19 Vaccines and Treatments: A Critical Review”, *Virginia Journal of International Law Online (Forthcoming 2021),* Feb 12, 2021

The **protection of IP not only provides incentives to innovators to create, but also plays a crucial role in ensuring the safety of vaccines and helping to prevent the importation of fraudulent and dangerous goods.** Unlike the typical pharmaceutical industry, the vaccine market is not a free and open market.69 Vaccines contain biological products made from living organisms **and the risk of failure in vaccine development and production is high.** 70 Moreover, **the manufacturing process for vaccines is** much more **complex** as it requires the use of facilities and equipment with a high degree of specialization.71 The complexity of vaccine products implies that more time and regulatory requirements are needed in order to make or “copy” the vaccine production process. Therefore, the innovator should be expected to make conscious and meticulous decisions as to when and to whom to issue licenses, as this is the most responsible way to bring their technologies to the world and safeguard global health. **In addition, as the COVID-19 pandemic continues there has been a noticeable increase in the circulation of fake medicines around the world.** According to the International Criminal Police Organization (Interpol), **organized crime groups have been producing fake drugs and medical products and selling them for lucrative profits in developing countries.72 With the development of COVID-19 vaccines on the market, a rapid rise in the illegal sale of fake items is expected**, according to the United Nations Office on Drugs and Crime (UNODC).73 Counterfeits of the legitimate products provide false promises of protection and could lead to disastrous consequences, including worsened illness and death for the individual and the retardation of herd immunity for the population at large. **Effective and proactive IP procurement is essential and useful in mitigating the risks of counterfeit and substandard medicines. IP enforcement measures play a significant role in preventing these fake and illicit medicines from circulating in the market.** While important during normal times, IP enforcement can take on an enhanced role of safeguarding the public during this critical period of time. **Waiving all COVID-19 related IPRs raises the risk of unsafe or fake vaccines circulating in supply channels and being sold to unsuspecting governments, putting millions of human lives at risk and reducing trust in vaccines.**

**Counterfeits are horrible as they lead to dangerous medications**

**Williams et al. 14**

Lakeisha Williams, Pharmd, Msph Drug Information Specialist Xavier University Of Louisiana College Of Pharmacy New Orleans, Louisiana Ellen Mcknight Pharmd Candidate, 2017 Xavier University Of Louisiana College Of Pharmacy New Orleans, Louisiana, 6-19-2014, "The Real Impact of Counterfeit Medications," No Publication, [https://www.uspharmacist.com/article/counterfeit-meds%20/](https://www.uspharmacist.com/article/counterfeit-meds%2520/) // AW

**Counterfeit drugs have been defined as products deliberately and fraudulently produced and/or mislabeled with respect to identity and/or source to make it appear to be a genuine product.**1-4 Counterfeit medications include drugs that contain no active pharmaceutical ingredient (API), an incorrect amount of API, an inferior-quality API, a wrong API, contaminants, or repackaged expired products.1,5 Some counterfeit medications may even be incorrectly formulated and produced in substandard conditions.5 Counterfeiting can apply to both branded pharmaceuticals and their less expensive generic counterparts.6 **In fact, generic drugs are sometimes confused with counterfeit medications, which may pose an obstacle to the widespread use and acceptance of generic medications. This may create a particular challenge for pharmaceutical industries in places such as India, Europe, and Japan—countries in which generic drugs are manufactured.** Moreover, any impact on generic-drug use is potentially far-reaching. It is estimated that half of all prescriptions in the United States, for example, are now filled with approved generic drugs, with expenditures estimated in the billions.6 Counterfeit Drugs: A Global Problem **For years, the number of counterfeit medications that have made their way into trusted pharmacies and subsequently to patients’ medicine cabinets has been on the rise. Imagine the scenario in which a patient takes a medication for a life-threatening illness, only to become aware later that the doses contained no [active pharmaceutical ingredients] APIs.** It is estimated that **this misfortune has occurred with thousands of people worldwide and continues to happen.** The growing issue of counterfeit medications is a concern not only for the patient, but also for pharmacists and pharmaceutical companies. Wertheimer et al state that **the magnitude of the drug-counterfeiting problem is difficult to gauge**.7 Since **the crimes of producing and selling counterfeit drugs generally become known only when the perpetrators are caught**, any accurate determination of prevalence is difficult.7 The World Health Organization **(WHO) has estimated that 10% of global pharmaceutical commerce, or $21 billion worth, involves counterfeit drugs**.7,12 **Drug counterfeiting, although not a new phenomenon, has provoked greater concern because it has become so widespread in recent years**.8,9 A WHO study revealed that nearly one-half (48.7%) of the documented cases of drug counterfeiting were reported in developing countries of the Western Pacific (China, the Philippines, and Vietnam), followed by developing countries grouped within WHO’s Regional Office for Africa, with 18.7%. The industrialized areas of WHO’s Regional Office for Europe came in third, with 13.6% of reported cases.10,11 It is estimated that approximately 1% of counterfeit medications are sold in the U.S, but the numbers are increasing annually.1 Most U.S. counterfeit medications are purchased online; however, others have infiltrated legitimate supply chains. Drugs Most Often Counterfeited **High-demand, expensive medications such as various chemotherapeutic drugs, antibiotics, vaccines, erectile dysfunction drugs, weight loss aids, hormones, analgesics, steroids, antihistamines, antivirals, and antianxiety drugs are common counterfeiting targets**.1,3,4 Among those deceived into buying counterfeit drugs are consumers who use medicines inappropriately or who seek to purchase medications at discounted prices. **In addition to being very cheap to make, counterfeit medicines often closely resemble actual medications, with nearly identical labels and tablets, thus duping unsuspecting pharmacists and patients. It has been reported that oftentimes drug counterfeiters use cheap and sometimes harmful materials such as brick dust, sheetrock, and flour to create their bogus tablets.13 Pfizer reported discovering 14 of its counterfeited pharmaceutical products in at least 36 countries, including the U.S., in the first 9 months of 2009 and reportedly seized more than 11 million counterfeit tablets, capsules, and vials that year.1,14,15 Also in 2009, a U.S. government crackdown uncovered some 800 packages of counterfeit medications, including Viagra (sildenafil citrate), Vicodin (hydrocodone bitartrate and acetaminophen), and Claritin (loratadine).16 Mui and Ylan state that some of the drugs had as much as three times the amount of API than is typically prescribed, while others contained no API at all or harmful substances.**16 Internet Sites the Largest Suppliers Increasing access to the Internet coupled with new methods of manufacturing and distributing illegal pharmaceuticals have created new challenges to safeguarding the legitimate pharmaceutical supply chain.2 Thousands of websites openly sell unapproved and/or counterfeit drugs, as well as prescription drugs without requiring a valid prescription, all in violation of federal and state laws. Many of these sites are hosted by U.S. registrars, accept payment by U.S. payment processors, and ship their products via U.S.-based express courier companies or the U.S. Postal Service (USPS).2 Counterfeit Drugs: A Public Health Concern **Counterfeiting drugs is not only illegal, but it is also a major public health concern. Counterfeit drugs often contain the correct ingredients in incorrect quantities; however, they may also contain either a wrong API—which may even be toxic—or no active substance at all**.15 Treatment with ineffective counterfeit drugs such as antibiotics can lead to the emergence of resistant organisms and may have a deleterious effect on a wide section of the population. In extreme cases, counterfeit drugs may even cause death.3 For example, it has been estimated that between **60,000 and 80,000 children in Niger with fatal falciparum malaria were treated with a counterfeit vaccine** containing only chloramphenicol, an antibiotic that is generally combined with another medication, which may have resulted in more than 100 fatal infections.17, 18 As a consequence of such damaging effects, **counterfeit drugs may erode public confidence in healthcare systems, healthcare professionals, the suppliers and sellers of genuine drugs, the pharmaceutical industry, and national drug regulatory** **authorities**.4 Taking Legal Action To disrupt and dismantle illicit networks trading these harmful counterfeit drugs in the U.S. and countries such as Africa and Asia, the White House’s Counterfeit Inter-Agency Working Group has collaborated with the FDA; the Departments of Justice, State, and Commerce; and the Agency for International Development as well as both foreign and domestic law enforcement partners such as U.S. Customs and Border Protection and U.S. Immigration and Customs Enforcement. In order to eliminate the distribution of counterfeit drugs, the combined efforts of these agencies have implemented strategies that include partnerships with the private sector to secure supply chains and share intelligence; identify, seize, forfeit, and destroy products that infringe trademarks and copyrights; and levy monetary penalties and enforce laws at the U.S. border.2 The FDA is working with law enforcement agencies and USPS inspectors to secure the global drug-supply chain by identifying drugs that are most likely to be counterfeited, contaminated, or adulterated and targeting shipments of these drugs for additional inspection.1 In addition, anticounterfeiting initiatives in other countries have been launched, including the Anti-Counterfeiting Trade Agreement—an initiative between the European Union, Japan, the U.S., and Switzerland. Other efforts to thwart counterfeiting include the World Customs Organization’s Provisional Standards Employed by Customs for Uniform Rights Enforcement, G-8 Countries’ Initiatives on Counterfeits, World Intellectual Property Organization’s Advisory Committee on Enforcement, and Security and Prosperity Partnership, an initiative between Canada, Mexico, and the U.S.6 Anticounterfeiting Technologies Many anticounterfeiting technologies are being utilized by pharmaceutical companies to ensure distribution of the authentic product from the manufacturing site to the pharmacy.1 Among these technologies used by pharmaceutical manufacturers are holograms, color-shifting inks, and embedded codes, images, and dyes.1 These anticounterfeiting features allow pharmacists to identify suspicious medications as possible counterfeits. Protecting Consumers According to the Pharmaceutical Research and Manufacturers of America, consumers who purchase medications online should avoid the following: sites that are located outside of the U.S. that do not indicate any physical address; sites that do not have a license by the relevant State Boards of Pharmacy; sites without a licensed pharmacist to answer questions; and websites that do not require a prescription.8,10 Consumers who wish to purchase drugs over the Internet should look for websites that have the Verified Internet Pharmacy Practice Sites seal. These sites, which are created by the National Association of Boards of Pharmacy, are licensed pharmacies selling FDA-approved medications to discourage the sale of counterfeit drugs from illegitimate online sources.5 Role of the Pharmacist Pharmacists are vital in ensuring the safety of medications used by patients. Furthermore, they are responsible for the integrity of the supply chain, ranging from manufacturer to distributor and, ultimately, to the patient. Specifics on how pharmacists, pharmacy students, and technicians can combat counterfeit medications are shown in TABLE 1.1,11  Conclusion **Counterfeit medications may be detrimental to a patient’s health status. The use of substandard drugs may result in adverse side effects, treatment failure, resistance, toxicity, and even death. It is important that pharmaceutical companies, healthcare professionals, pharmacists, and patients be educated about counterfeit medications and the laws being enforced to prevent this crime.** With increased awareness and the promotion of global health, the growing threat of counterfeit medications may begin to decline.

**This links into utilitarianism because a reduction in IPR’s will lead to more death which contradicts utilitarian ethics.**

**Contention 2- Bioterrorism**

**My second contention is that reducing intellectual property protections will render us vulnerable to bioterrorism.**

**Bioterrorism is becoming a massive threat in the status quo-**

**United Nations, 18**

(United Nations, 8-17-2018, accessed on 8-26-2021, UN News, "Terrorists potentially target millions in makeshift biological weapons ‘laboratories’, UN forum hears", [Chaminade ZS] <https://news.un.org/en/story/2018/08/1017352>)

**Rapid advances in gene editing and so-called “DIY biological laboratories”which could be used by extremists, threaten to derail efforts to prevent biological weapons from being used against civilians,** the world’s only international forum on the issue has heard. At meetings taking place at the United Nations in Geneva which ended on Thursday, representatives from more than 100 Member States which have signed up to the Biological Weapons Convention (BWC) - together with civilian experts and academics - also discussed how they could ensure that science is used to positive ends, in line with the disarmament blueprint set out by UN Secretary-General António Guterres. Although the potential impact of a biological weapons attack could be huge, the likelihood is not currently believed to be high. The last attack dates back to 2001, when letters containing toxic anthrax spores, killed five people in the US, just days after Al Qaeda terrorists perpetrated the 9/11 attacks on New York and Washington. Nonetheless, **the rise of extremist groups and the potential risk of research programmes being misused, has focused attention on** the work of the BWC. “There’s **interest from terror groups and** we’re also seeing **the erosion of norms on chemical weapons**,” said Daniel Feakes, head of the BWC Implementation Support Unit at the UN in Geneva.“ **That could spread to biological weapons** as well,” he said, adding that “at the worst, you could be talking of epidemics on the scale of the Ebola outbreak in West Africa, or even a global pandemic that could result in millions of deaths.” In a bid to stay on top of the latest biological developments and threats, the BWC’s 181 Member States hold a series of meetings with experts every year, traditionally in the summer. The reports that are discussed during these sessions are then formerly appraised in December. At the eight-day session just ended, science and technology issues were debated for two days – a measure of their importance. Among the developments discussed was the groundbreaking gene-editing technique CRISPR. It can be applied – in theory – to any organism. Outside the Geneva body, CRISPR’s use has raised ethical questions, Mr. Feakes said, but among Member States, security ramifications dominated discussions. “Potentially, it could be used to develop more effective biological weapons,” he said, noting that the meetings addressed the growing trend of “DIY biological labs”. However, the meetings also focused on the promotion of "responsible science" so that "scientists are part of the solution, not the problem”. In addition to concerns that the Biological Weapons Convention lacks full international backing, the body has also faced criticism that its Members are not obliged to allow external checks on any illegal stockpiles they might have. The issue highlights the fact that the BWC lacks a strong institution, its handful of administrators dwarfed by larger sister organizations including the OPCW – the Organisation for the Prohibition of Chemical Weapons. The OPCW’s 500-strong staff - based in the Hague - have weapons inspectors training facilities, Feakes notes, explaining that the BWC’s focus is therefore much more “about what States do at a national level”.

**The private sector accounts for almost all innovations in medicine**

**Sullivan 18**

Thomas Sullivan, Editor of Policy and Medicine, President of Rockpointe Corporation.  “NEJM The Private Sector Discoveries Account for 79–90% of Pharmaceutical Products”. 5/5/18. Accessed 8/28/21. [Chaminade ZS]

<https://www.policymed.com/2011/02/nejm-the-private-sector-discoveries-account-for-79-90-of-pharmaceutical-products.html>

**The discovery and development of new drugs, medicines, and vaccines to solve unmet medical needs is an extremely long and expensive process.** Generally, the public-sector research, such as the work done at the National Institutes of Health (NIH), is focused on “upstream, basic research to elucidate the underlying mechanisms and pathways of disease and identify promising points of intervention.” On the other side of the equation, “**corporate researchers have performed the downstream, applied research to discover drugs that can be used to treat diseases and have then carried out the development activities to [brought] bring the drugs to market. The intellectual property that protects the investment in developing these drugs is created in the applied-research phase.”**In some cases, research conducted by NIH or other Public-sector research institutions (PSRIs) provide the “foundation for the pharmaceutical industry’s discovery of an entirely new class of drugs.” Nevertheless, pharmaceutical companies and industry still take on the heavy burden of carrying out and paying for the applied research phase. Consequently, a recent article in the New England Journal of Medicine (NEJM), focused on the impact of PSRIs, while downplaying the crucial role pharmaceutical companies play. While the article, entitled “The Role of Public-Sector Research in the Discovery of Drugs and Vaccines” notes that “PSRIs have contributed to the discovery of 9.3 to 21.2% **of all drugs involved in new-drug applications approved during the period from 1990 through 2007**,” it fails to acknowledge where the other **80-90%** of drugs **come from: the pharmaceutical industry**.

**IP rights, IPRs, are key to innovation—studies proves**

**Ezell and Cory 19**

Stephen Ezell (vice president of global innovation policy at the Information Technol‐ ogy and Innovation Foundation; founder of Peer Insight, an innovation research and consulting firm) and Nigel Cory (associate director covering trade policy at the Infor‐ mation Technology and Innovation Foundation; formerly a researcher in the South‐ east Asia Program at the Center for Strategic and International Studies and worked for eight years in Australia’s Department of Foreign Affairs and Trade). “The Way For‐ ward for Intellectual Property Internationally.” Information Technology & Innovation Foundation. 25 April 2019. JDN. [https://itif.org/publications/2019/04/25/way‐forward‐intellectual‐property‐internationally](https://itif.org/publications/2019/04/25/way%E2%80%90forward%E2%80%90intellectual%E2%80%90property%E2%80%90internationally) [Chaminade AS]

**Intellectual property rights power innovation.** For instance, analyzing the level of intellectual property protections (via the World Economic Forum’s Global Competitive‐ ness reports) and creative outputs (via the Global Innovation Index) shows that counties with stronger IP protection have more creative outputs (in terms of intangible assets and creative goods and services in a nation’s media, printing and publishing, and entertain‐ ment industries, including online), even at varying levels of development.46 IPR reforms also introduce strong incentives for domestic innovation. Sherwood, using **case studies from 18 developing countries, concluded that poor provision of intellectual property rights deters local innovation and risk‐taking.**47 In contrast, IPR reform has been associated with increased innovative activity, as measured by domestic patent filings, albeit with some variation across countries and sectors.48 For example, Ryan, **in a study of biomedical innovations and patent reform** in Brazil, **found that patents provided incentives for innovation investments and facilitated the functioning of technology markets.**49 Park and Lippoldt also observed that the provision of adequate pro‐ tection for IPRs can help to stimulate local innovation, in some cases building on the transfer of technologies that provide inputs and spillovers.50 In other words, local in‐ novators are introduced to technologies first through the technology transfer that takes place in an environment wherein protection of IPRs is assured; then, they may build on those ideas to create an evolved product or develop alternate approaches (i.e., to in‐ novate). Related research finds that trade in technology—through channels including imports, foreign direct investment, and technology licensing—improves the quality of developing‐country innovation by increasing the pool of ideas and efficiency of inno‐ vation by encouraging the division of innovative labor and specialization.51 However, Maskus notes that **without protection from potential abuse of their newly developed technologies, foreign enterprises may be less willing to reveal technical information associated with their innovations.52 The protection of patents and trade secrets provides necessary legal assurances for firms** wishing to reveal proprietary characteristics of tech‐ nologies to subsidiaries and licensees via contracts. The relationship between IPR rights and innovation can also be seen in studies of how the introduction of stronger IPR laws, with regard to patents, copyrights, and trade‐ marks, affect R&D activity in an economy. Studies by Varsakelis and by Kanwar and Evenson found that R&D to GDP ratios are positively related to the strength of patent rights, and are conditional on other factors.53 Cavazos **Cepeda et al. found a positive influence of IPRs on the level of R&D in an economy, with each 1 percent increase in the level of protection of IPRs in an economy** (as measured by improvements to a coun‐ try’s score in the Patent Rights Index) **equating [equates] to, on average, a 0.7 percent increase in the domestic level of R&D.**54 Likewise, **a 1 percent increase in copyright protection was associated with a 3.3 percent increase in domestic R&D.** Similarly, when trademark protection increased by 1 percent, there was an associated R&D increase of 1.4 percent. As the authors concluded, “**Increases in the protection of the IPRs carried economic benefits** in the form of higher inflows of FDI, and increases **in the levels of both domestically conducted R&D and service imports as measured by licensing fees**.”55 As Jackson summarized, regarding the relationship between IPR reform and both innovation and R&D, and FDI, “In addition to spurring domestic innovation, **strong intellectual property rights can increase incentives for foreign direct investment which in turn also leads to economic growth.”56**

**By reducing intellectual property protections, the aff will lower the incentives for private companies to make lifesaving medicines and vaccines. This is disastrous because**

**Innovation is required to stop bioterrorism.**

**Marjanovic and Feijao 20**

Sonja Marjanovic and Carolina Feijao (May 2020), "Pharmaceutical Innovation for Infectious Disease Management From Troubleshooting to Sustainable Models of Engagement", , RAND Europe, <https://www.rand.org/pubs/perspectives/PEA407-1.html>

**The** primary **purpose** **of** such **innovation is to benefit** patients and **wider population health.** Although there are also reputational benefits from involvement that can be realised across the industry, there are likely to be relatively few companies that are ‘commercial’ winners. Those who might gain substantial revenues will be under pressure not to be seen as profiting from the pandemic. In the United Kingdom for example, GSK has stated that it does not expect to profit from its COVID-19 related activities and that any gains will be invested in supporting research and long-term pandemic preparedness, as well as in developing products that would be affordable in the world’s poorest countries.7 Similarly, in the United States AbbVie has waived intellectual property rights for an existing combination product that is being tested for therapeutic potential against COVID-19, which would support affordability and allow for a supply of generics.8,9 Johnson & Johnson has stated that its potential vaccine – which is expected to begin trials – will be available on a not-for-profit basis during the pandemic.10  Pharma is mobilising substantial efforts to rise to the COVID-19 challenge at hand. However, we need to consider how pharmaceutical innovation for responding to emerging infectious diseases can best be enabled beyond the current crisis. **Many public health threats (including** those associated with other infectious diseases, **bioterrorism** agents and antimicrobial resistance**)** **are urgently in need of pharmaceutical innovation,** even if their impacts are not as visible to society as COVID-19 is in the immediate term. The pharmaceutical industry has responded to previous public health emergencies associated with infectious disease in recent times – for example those associated with Ebola and Zika outbreaks.11 However, it has done so to a lesser scale than for COVID-19 and with contributions from fewer companies. Similarly, levels of activity in response to the threat of antimicrobial resistance are still low.12 There are important policy questions as to whether – and how – industry could engage with such public health threats to an even greater extent under improved innovation conditions. The COVID-19 pandemic is a game-changer among global public health threats. **The risk to human life** (both in terms of morbidity and quality of life)**, the economic risks, the epidemiology of the disease and speed of escalation have led to a crisis-response by many governments around the world. This has in turn influenced the immediate industry efforts. Many other infectious disease threats may not manifest as crises in the short term and in the same way as COVID-19, but they could nevertheless escalate.** They are not considered to be crises from a short term perspective because they are contained to specific regions and affect fewer people at present – or are re-emerging (e.g. Ebola) – or their impacts have not yet materialised at a scale that would qualify as an immediate crisis (e.g. growing risks of antimicrobial resistance to some infectious pathogens). However, such diseases and issues are recognised as global threats that could become crises in the future.13 The emerging threats raise important policy questions about how government and the pharmaceutical industry can work together to ensure that pharmaceutical industry innovation is incentivised sustainably and at scale. This is important to help mitigate against current and emerging threats becoming crises further down the line. At present, there are no clear and specific criteria to determine when a disease can trigger the types of healthcare-innovation-related policy actions that have been deployed in response to the COVID-19 crisis. For example, this applies to criteria for securing financial resources for innovation-related activities, reforming regulation to accelerate trials and regulatory approval processes, and securing reimbursement mechanisms that help enable industry engagement and the search for rapid solutions. The WHO guidance on what constitutes a pandemic phase does provide guidance on national policy response options, but not specifically as they relate to healthcare innovation activity.14 There are also questions as to whether such policy initiatives and incentives should only be applied in crisis situations, or also as part of proactive government and industry efforts to innovate in the areas of public health threats in order to prevent future global calamities. A crisis and ‘emergency mode’ response may be inevitable for some diseases, but more can be done to mitigate against the need for such a response – especially in cases where emerging threats and their consequences can be foreseen and are known to be a risk. We need to anticipate and act now in terms of how we plan and incentivise better for the future, and how we distinguish between different types of infectious disease threats and phases in framing incentives and regulation.

**With the private sector not innovating and developing necessary medicine, bioterror greatly risks extinction.**

**Ochs 02**

Richard Ochs, Chemical Weapons Working Group Member, 2002 [“Biological Weapons must be Abolished Immediately,” June 9, [http://www.freefromterror.net/other\_.../abolish.html]](http://www.freefromterror.net/other_articles/abolish.html%5D)

**Of all the weapons of mass destruction, the genetically engineered biological weapons, many without a known cure or vaccine, are an extreme danger to the continued survival of life on earth**. Any perceived military value or deterrence pales in comparison to the great risk these weapons pose just sitting in vials in laboratories. **While a "nuclear winter," resulting from a massive exchange of nuclear weapons, could also kill off most of life on earth and severely compromise the health of future generations, they are easier to control**. Biological weapons, on the other hand, can get out of control very easily, as the recent anthrax attacks has demonstrated. **There is no way to guarantee the security of these doomsday weapons because very tiny amounts can be stolen or accidentally released and then grow or be grown to horrendous proportions.** The Black Death of the Middle Ages would be small in comparison to the potential damage bioweapons could cause. Abolition of chemical weapons is less of a priority because, while they can also kill millions of people outright, their persistence in the environment would be less than nuclear or biological agents or more localized. Hence, chemical weapons would have a lesser effect on future generations of innocent people and the natural environment. Like the Holocaust, once a localized chemical extermination is over, it is over. With nuclear and biological weapons, the killing will probably never end. Radioactive elements last tens of thousands of years and will keep causing cancers virtually forever. **Potentially worse than that, bio-engineered agents by the hundreds with no known cure could wreck even greater calamity on the human race than could persistent radiation. AIDS and ebola viruses are just a small example of recently emerging plagues with no known cure or vaccine. Can we imagine hundreds of such plagues? HUMAN EXTINCTION IS NOW POSSIBLE.**

**Bioterror links into utilitarianism because bioterrorism leads to extinction which, as Bostrom 13 stated, is the highest impact under mine and my opponent’s framework.**