### FW

#### The standard is maximizing expected wellbeing.

#### 1] Pleasure is intrinsically valuable and pain is intrinsically disvaluable

Moen 16 [Ole Martin Moen, Research Fellow in Philosophy at University of Oslo “An Argument for Hedonism” Journal of Value Inquiry (Springer), 50 (2) 2016: 267–281] SJDI

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 [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.**

#### 2] Moreover, *only* pleasure and pain are intrinsically valuable. All other values can be explained with reference to pleasure; Occam’s razor requires us to treat these as instrumentally valuable.

Moen 16 [Ole Martin Moen, Research Fellow in Philosophy at University of Oslo “An Argument for Hedonism” Journal of Value Inquiry (Springer), 50 (2) 2016: 267–281] SJDI

I think several things should be said in response to Moore’s challenge to hedonists. First, **I do not think the burden of proof lies on hedonists to explain why the additional values are not intrinsic values. If someone claims that X is intrinsically valuable, this is a substantive, positive claim, and it lies on him or her to explain why we should believe that X is in fact intrinsically valuable.** Possibly, this could be done through thought experiments analogous to those employed in the previous section. Second, **there is something peculiar about the list of additional intrinsic values** that counts in hedonism’s favor**: the listed values have a strong tendency to be well explained as things that help promote pleasure and avert pain.** To go through Frankena’s list, life and consciousness are necessary presuppositions for pleasure; activity, health, and strength bring about pleasure; and happiness, beatitude, and contentment are regarded by Frankena himself as “pleasures and satisfactions.” The same is arguably true of beauty, harmony, and “proportion in objects contemplated,” and also of affection, friendship, harmony, and proportion in life, experiences of achievement, adventure and novelty, self-expression, good reputation, honor and esteem. Other things on Frankena’s list, such as understanding, **wisdom, freedom, peace, and security, although they are perhaps not themselves pleasurable, are important means to achieve a happy life, and as such, they are things that hedonists would value highly.** **Morally good dispositions and virtues, cooperation, and just distribution of goods and evils, moreover, are things that, on a collective level, contribute a happy society, and thus the traits that would be promoted and cultivated if this were something sought after.** To a very large extent, the intrinsic values suggested by pluralists tend to be hedonic instrumental values. Indeed, pluralists’ suggested intrinsic values all point toward pleasure, for while the other values are reasonably explainable as a means toward pleasure, pleasure itself is not reasonably explainable as a means toward the other values. Some have noticed this. Moore himself, for example, writes that though his pluralistic theory of intrinsic value is opposed to hedonism, its application would, in practice, look very much like hedonism’s: “Hedonists,” he writes “do, in general, recommend a course of conduct which is very similar to that which I should recommend.”24 Ross writes that “[i]t is quite certain that by promoting virtue and knowledge we shall inevitably produce much more pleasant consciousness. These are, by general agreement, among the surest sources of happiness for their possessors.”25 Roger Crisp observes that “those goods cited by non-hedonists are goods we often, indeed usually, enjoy.”26 What Moore and Ross do not seem to notice is that their observations give rise to two reasons to reject pluralism and endorse hedonism. The first reason is that if **the suggested non-hedonic intrinsic values are potentially explainable by appeal to just pleasure and pain** (which, following my argument in the previous chapter, we should accept as intrinsically valuable and disvaluable), **then—by appeal to Occam’s razor—we have at least a pro tanto reason to resist the introduction of any further intrinsic values and disvalues. It is ontologically more costly to posit a plurality of intrinsic values and disvalues, so in case all values admit of explanation by reference to a single intrinsic value and a single intrinsic disvalue, we have reason to reject more complicated accounts.** **The fact that suggested non-hedonic intrinsic values tend to be hedonistic instrumental values does not, however, count in favor of hedonism solely in virtue of being most elegantly explained by hedonism; it also does so in virtue of creating an explanatory challenge for pluralists.** The challenge can be phrased as the following question: **If the non-hedonic values suggested by pluralists are truly intrinsic values in their own right, then why do they tend to point toward pleasure and away from pain?**27

#### 3] Actor specificity:

#### ---A] Aggregation – every policy benefits some and harms others, so side constraints freeze action.

#### ---B] States lack wills or intentions since policies are collective actions.

#### ---C] No act-omission distinction—governments are responsible for everything in the public sphere, so inaction is implicit authorization of action: they have to yes/no bills, which means everything collapse to aggregation.

#### ---D] Actor-specificity first since different agents have different ethical standings. Link turns calc indicts because the alt would be *no* action.

#### 4] Lexical pre-requisite: threats to bodily security preclude the ability for moral actors to effectively act upon other moral theories since they are in a constant state of crisis that inhibits the ideal moral conditions which other theories presuppose

#### 5] Use epistemic modesty – that’s multiplying the probability of a framework being true by its general contention impact –

#### ---A] It maximizes the probability of achieving net most moral value—beating a framework acts as mitigation to their impacts but the strength of that mitigation is contingent

#### ---B] EC is too high a burden—thousands of years of philosophy can’t be resolved in 40 minutes.

#### ---C] Topic education—disincentives debaters from going all in for framework which means we get the ideal balance between topic ed and phil ed—it’s important to talk about contention-level offense because we only have the topic for two months.

#### ---D] Clash — we don’t know if our frameworks are true, but we can debate the topical question. That incentivizes debating both layers instead of solely focusing on framework.

#### 6] Extinction comes first under any framework

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 BWSEKL.

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 only. There is a tendency 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. It is enough for my claim that there is moral agreement in the relevant sense if, at least given certain empirical claims about what future lives would most likely be like, all minimally plausible moral views would converge on the conclusion that we should try to save the world. While there are some non-crazy views that place significantly greater moral weight on avoiding suffering than on promoting happiness, for reasons others have offered (and for independent reasons I won’t get into here unless requested to), they nonetheless seem to be fairly implausible views. And even if things did not go well for our ancestors, I am optimistic that they will overall go fantastically well for our descendants, if we allow them to. I suspect that most of us alive today – at least those of us not suffering from extreme illness or poverty – have lives that are well worth living, and that things will continue to improve. Derek Parfit, whose work has emphasized future generations as well as agreement in ethics, described our situation clearly and accurately: “We live during the hinge of history. Given the scientific and technological discoveries of the last two centuries, the world has never changed as fast. We shall soon have even greater powers to transform, not only our surroundings, but ourselves and our successors. If we act wisely in the next few centuries, humanity will survive its most dangerous and decisive period. Our descendants could, if necessary, go elsewhere, spreading through this galaxy…. Our descendants might, I believe, make the further future very good. But that good future may also depend in part on us. If our selfish recklessness ends human history, we would be acting very wrongly.” (From chapter 36 of On What Matters)

## Off

### 1NC – Climate Innovation

#### The United States should publicly repudiate waivers.

#### Current IP protections protect investment in climate change reduction – COVID waiver spills over to reduce innovation

Brand 5/26 [Melissa Brand is Assistant General Counsel and Director of Intellectual Property at the Biotechnology Innovation Organization (BIO), a major trade association with over 1,000 members in the biotechnology industry. May 26, 2021, “TRIPS IP Waiver Could Establish Dangerous Precedent for Climate Change and Other Biotech Sectors,” ipwatchdog, www.ipwatchdog.com/2021/05/26/trips-ip-waiver-establish-dangerous-precedent-climate-change-biotech-sectors/id=133964//lhs-ap]

While the discussions around waiving intellectual property (IP) rights set forth in the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) are currently (and somewhat amorphously) limited to COVID-19 related drug and medical products, it is probably shortsighted to ignore the implications for other technologies critical to sustaining our environment and advancing a more healthful world. In fact, if we want to ensure continued investment in these technologies, we should be very concerned about the message conveyed by the international political tide: if you overcome a challenging scientific problem and your solution has the potential to save lives, be prepared to be subjected to intense political pressure and to potentially hand over your technology without compensation and regardless of the consequences.

The biotech industry is making remarkable advances towards climate change solutions, and it is precisely for this reason that it can expect to be in the crosshairs of potential IP waiver discussions. President Biden is correct to refer to climate change as an existential crisis. Yet it does not take too much effort to connect the dots between President Biden’s focus on climate change and his Administration’s recent commitment to waive global IP rights for Covid vaccines (TRIPS IP Waiver). “This is a global health crisis, and the extraordinary circumstances of the COVID-19 pandemic call for extraordinary measures.” If an IP waiver is purportedly necessary to solve the COVID-19 global health crisis (and of course we dispute this notion), can we really feel confident that this or some future Administration will not apply the same logic to the climate crisis? And, without the confidence in the underlying IP for such solutions, what does this mean for U.S. innovation and economic growth? United States Trade Representative (USTR) Katherine Tai was subject to questioning along this very line during a recent Senate Finance Committee hearing. And while Ambassador Tai did not affirmatively state that an IP waiver would be in the future for climate change technology, she surely did not assuage the concerns of interested parties.

International Pressure May Be Influencing Domestic IP Policy

The United States has historically supported robust IP protection. This support is one reason the United States is the center of biotechnology innovation and leading the fight against COVID-19. However, a brief review of the domestic legislation arguably most relevant to this discussion shows just how far the international campaign against IP rights has eroded our normative position. The Clean Air Act, for example, contains a provision allowing for the mandatory licensing of patents covering certain devices for reducing air pollution. Importantly, however, the patent owner is accorded due process and the statute lays out a detailed process regulating the manner in which any such license can be issued, including findings of necessity and that no reasonable alternative method to accomplish the legislated goal exists. Also of critical importance is that the statute requires compensation to the patent holder. Similarly, the Atomic Energy Act contemplates mandatory licensing of patents covering inventions of primary importance in producing or utilizing atomic energy. This statute, too, requires due process, findings of importance to the statutory goals and compensation to the rights holder.

A TRIPS IP waiver would operate outside of these types of frameworks. There would be no due process, no particularized findings, no compensation and no recourse. Indeed, the fact that the World Trade Organization (WTO) already has a process under the TRIPS agreement to address public health crises, including the compulsory licensing provisions, with necessary guardrails and compensation, makes quite clear that the waiver would operate as a free for all.

Forced Tech Transfer Could Be on The Table

When being questioned about the scope of a potential TRIPS IP waiver, Ambassador Tai invoked the proverb “Give a man a fish and you feed him for a day. Teach a man to fish and you feed him for a lifetime.” While this answer suggests primarily that, in times of famine, the Administration would rather give away other people’s fishing rods than share its own plentiful supply of fish (here: actual COVID-19 vaccine stocks), it is apparent that in Ambassador Tai’s view waiving patent rights alone would not help lower- and middle-income countries produce their own vaccines. Rather, they would need to be taught how to make the vaccines and given the biotech industry’s manufacturing know-how, sensitive cell lines, and proprietary cell culture media in order to do so.

In other words, Ambassador Tai acknowledged that the scope of the current TRIPS IP waiver discussions includes the concept of forced tech transfer. In the context of climate change, the idea would be that companies who develop successful methods for producing new seed technologies and sustainable biomass, reducing greenhouse gases in manufacturing and transportation, capturing and sequestering carbon in soil and products, and more, would be required to turn over their proprietary know-how to global competitors.

While it is unclear how this concept would work in practice and under the constitutions of certain countries, the suggestion alone could be devastating to voluntary international collaborations. Even if one could assume that the United States could not implement forced tech transfer on its own soil, what about the governments of our international development partners? It is not hard to understand that a U.S.-based company developing climate change technologies would be unenthusiastic about partnering with a company abroad knowing that the foreign country’s government is on track – with the assent of the U.S. government – to change its laws and seize proprietary materials and know-how that had been voluntarily transferred to the local company.

Necessary Investment Could Diminish

Developing climate change solutions is not an easy endeavor and bad policy positions threaten the likelihood that they will materialize. These products have long lead times from research and development to market introduction, owing not only to a high rate of failure but also rigorous regulatory oversight. Significant investment is required to sustain and drive these challenging and long-enduring endeavors. For example, synthetic biology companies critical to this area of innovation raised over $1 billion in investment in the second quarter of 2019 alone. If investors cannot be confident that IP will be in place to protect important climate change technologies after their long road from bench to market, it is unlikely they will continue to invest at the current and required levels.

Next on the Chopping Block

It is quite reasonable to be worried about the broad implications of a TRIPS IP waiver precedent. International campaigns to weaken IP rights seem to be taking hold in U.S. domestic policy. The TRIPS IP waiver discussions will not conclude in the near term and will not yield more shots in people’s arms. This is not even truly disputed, as our own administration acknowledges that the goal here is technology transfer abroad. Given the signaling that our Administration believes waiving IP rights is an appropriate measure to end global crises, it is proper to worry that facets of the biotech sector addressing climate change may be next on the chopping block.

#### Extinction

Dr. Yew-Kwang Ng 19, Winsemius Professor of Economics at Nanyang Technological University, Fellow of the Academy of Social Sciences in Australia and Member of Advisory Board at the Global Priorities Institute at Oxford University, PhD in Economics from Sydney University, “Keynote: Global Extinction and Animal Welfare: Two Priorities for Effective Altruism”, Global Policy, Volume 10, Number 2, May 2019, pp. 258–266

Catastrophic climate change Though by no means certain, CCC causing global extinction is possible due to interrelated factors of non-linearity, cascading effects, positive feedbacks, multiplicative factors, critical thresholds and tipping points (e.g. Barnosky and Hadly, 2016; Belaia et al., 2017; Buldyrev et al., 2010; Grainger, 2017; Hansen and Sato, 2012; IPCC 2014; Kareiva and Carranza, 2018; Osmond and Klausmeier, 2017; Rothman, 2017; Schuur et al., 2015; Sims and Finnoff, 2016; Van Aalst, 2006).7 A possibly imminent tipping point could be in the form of ‘an abrupt ice sheet collapse [that] could cause a rapid sea level rise’ (Baum et al., 2011, p. 399). There are many avenues for positive feedback in global warming, including: • the replacement of an ice sea by a liquid ocean surface from melting reduces the reflection and increases the absorption of sunlight, leading to faster warming; • the drying of forests from warming increases forest fires and the release of more carbon; and • higher ocean temperatures may lead to the release of methane trapped under the ocean floor, producing runaway global warming. Though there are also avenues for negative feedback, the scientific consensus is for an overall net positive feedback (Roe and Baker, 2007). Thus, the Global Challenges Foundation (2017, p. 25) concludes, ‘The world is currently completely unprepared to envisage, and even less deal with, the consequences of CCC’. The threat of sea-level rising from global warming is well known, but there are also other likely and more imminent threats to the survivability of mankind and other living things. For example, Sherwood and Huber (2010) emphasize the adaptability limit to climate change due to heat stress from high environmental wet-bulb temperature. They show that ‘even modest global warming could ... expose large fractions of the [world] population to unprecedented heat stress’ p. 9552 and that with substantial global warming, ‘the area of land rendered uninhabitable by heat stress would dwarf that affected by rising sea level’ p. 9555, making extinction much more likely and the relatively moderate damages estimated by most integrated assessment models unreliably low. While imminent extinction is very unlikely and may not come for a long time even under business as usual, the main point is that we cannot rule it out. Annan and Hargreaves (2011, pp. 434–435) may be right that there is ‘an upper 95 per cent probability limit for S [temperature increase] ... to lie close to 4°C, and certainly well below 6°C’. However, probabilities of 5 per cent, 0.5 per cent, 0.05 per cent or even 0.005 per cent of excessive warming and the resulting extinction probabilities cannot be ruled out and are unacceptable. Even if there is only a 1 per cent probability that there is a time bomb in the airplane, you probably want to change your flight. Extinction of the whole world is more important to avoid by literally a trillion times.

### 1NC – Pharma Innovation

#### Disease research high now – Vaccine waiver is ineffective at accelerating vaccine distribution, but does stifle investment

Spiegel 8/5 [Andrew Spiegel is the executive director of the Global Colon Cancer Association, based in Bala Cynwyd, Pennsylvania. 5 August 2021, “How the COVID IP-waiver could sabotage crucial cancer research | Opinion,” delaware online, www.delawareonline.com/story/opinion/2021/08/05/covid-vaccine-patent-waiver-endangers-crucial-cancer-research/5487664001//lhs-ap]

President Joe Biden craves a cure for cancer. In a speech to Congress this spring, he vowed to "end cancer as we know it." And as Vice President, he helped start the Cancer Moonshot initiative.

Yet by giving his backing to a global waiver of intellectual property rights for COVID-19 vaccines, Biden may have endangered millions of Americans living with cancer.

The Biden administration has said that it would join a World Trade Organization move to suspend IP safeguards for the vaccines. Its intentions are no doubt sincere, founded in the belief that a waiver will help rid the world of COVID-19. Yet the setting aside of IP protections has consequences that the administration seems to have overlooked.

If adopted, the waiver won't galvanize the supply of vaccines bound for the developing world — certainly not in the immediate term. What it will do is threaten scientific innovation that could lead to cures for cancer and other diseases.

When the news that Biden would support the waiver broke, I received agitated call after agitated call from friends and colleagues in the cancer patient community. They wanted to know what the move would mean for them.

I had to be honest with them. I said I had a bad feeling.

I'll explain why. Technically, the waiver supported by the United States would only apply to IP on COVID-19 vaccines. So what has this got to do with cancer?

There are two consequences. First, intellectual property underpins scientists' incentives to make discoveries. Without proprietary "armor" to protect research, rivals could blithely — and lawfully — use scientists' know-how, data, or manufacturing processes.

Second, waiving IP on underlying vaccine technology has ramifications for drug innovation. Since the same technologies are used for potential treatments for other diseases, vaccine-makers would have to give up IP on those projects too.

Consider the Pfizer-BioNTech and Moderna vaccines. They use "mRNA" to promote an immune response to Covid-19, a technology that took decades to develop. The only people who really understand it are with American firms like Moderna and German companies like BioNTech, the firm that partnered with Pfizer for its mRNA vaccine. With the successful rollout of mRNA Covid-19 vaccines, researchers in the United States and Germany now hope they can use mRNA to fight other viruses. Moderna has active trials for mRNA vaccines for Zika, HIV, and the flu.

Cancer doctors and patients pray that mRNA is the key to a cure. Moderna, in fact, has two mRNA vaccine candidates for cancer. Researchers hope that mRNA could instruct the body to combat cancerous tumors like it fights a virus.

With the IP waiver, Moderna's mRNA technology could end up with rivals, leaving the company with greatly diminished incentives — and greatly diminished investment dollars — to continue with mRNA clinical trials, including ones for cancer. Advanced drug innovation could come to a halt. What investor would fund biotech startups if copycats can swoop in?

This scenario is made especially distressing by the fact that the upsides of the IP waiver are negligible. Manufacturers need specialized facilities and hundreds of ingredients to make traditional vaccines, let alone the new mRNA ones. Vaccine-makers have struck licensing deals to scale up production. Every facility on earth that can safely produce effective vaccines is already doing so. As a result, more than a quarter of the world's population has received at least one vaccine dose and more than 3.69 billion doses have been administered globally. Getting rid of IP won't make the scale-up go any faster. It could, however, unleash millions of shoddy copycats and even counterfeit vaccine doses.

President Biden has shown how he can help vaccinate the world without holding mRNA research hostage. For instance, he has already agreed to donate 580 million of the United States' surplus vaccine doses to COVAX — a WHO, CEPI, and Gavi co-led initiative to distribute COVID-19 vaccines to developing countries. And, with other funding the Biden administration has put towards COVAX, the initiative can purchase 330 million more COVID-19 vaccine doses.

With Biden, the cancer community has an ally in the White House. And yet, with the IP waiver, he's undermining the only industry that may find a cure for cancer.

#### mRNA innovation key to pandemic response

[Alexis Hubaud is a PhD student in Developmental Biology working at the Brigham and Women’s Hospital / Harvard Medical School. “RNA vaccines: a novel technology to prevent and treat disease,” May 5, 2015, Harvard SITN, https://sitn.hms.harvard.edu/flash/2015/rna-vaccines-a-novel-technology-to-prevent-and-treat-disease//lhs-ap]

How are they produced?

With the considerable progress in DNA sequencing, it has become relatively easy to determine the genome sequence of pathogens. RNA can thus be produced in vitro, i.e. outside the cells, using a DNA template containing the sequence of a specific antigen. Creating a RNA vaccine also requires some engineering of the RNA to achieve a strong expression of the antigen [4,6].

This is a much simpler process than the culture of virus in eggs. Egg cultures, the more common way of producing vaccines, can provoke allergic reactions; the in vitro production of RNA avoids this possibility. Producing RNA vaccines is also less expensive than producing the full antigen protein [4,6,7].

Another advantage is that the production of RNA-based vaccines is more rapid compared to production of traditional vaccines. This rapid production could be a major advantage in face of sudden pandemics. Moreover, RNA-based vaccines may be effective against pandemics because they also provide more flexibility to prevent or treat pathogens that are rapidly evolving [8,9]. For instance, influenza vaccines have to be tailored each year to specific strains that are most likely to cause disease in the coming season. However, these forecasts have not always been accurate, such as during the winter of 2014-2015, making the influenza vaccine less protective. The World Health Organization estimates it takes approximately five to six months to produce an influenza vaccine, whereas the company CureVac claims that RNA-based vaccines could be manufactured in less than two months at a lower production cost, making it possible to respond to epidemics even as they develop. Therefore, RNA-based vaccines offer a comparatively simple and rapid solution to unpredictable, rapidly evolving pathogens.

While injection of simple RNA can elicit an immune response, RNAs in this form are prone to a rapid degradation. Current vaccines are fragile and can lose their efficiency when exposed at freezing or high temperatures, and must be stored at 35-45°F (2-8°C)[4,6,10]. Thus, preserving the cold chain is a major hurdle for the implementation of vaccine campaign. Fortunately, scientists have found ways to combat this RNA degradation. For instance, they can change the sequence of RNA to make it much easier to store. Furthermore, other molecules can be added to bind the RNA and protect it. Such engineering enables the storage of RNA vaccines at room temperature for at least 18 months. This feature precludes the necessity of maintaining the cold chain, making RNA vaccines particularly practical for developing countries.

What is the current state of the research?

This new exciting technology could be applied to many diseases, and pharmaceutical companies are making major investments in that area. RNA vaccines are still at the pre-clinical or clinical stage, but have yielded promising results. Below, we will explore two examples with the most advanced results: RNA vaccines to treat cancer and RNA vaccines to prevent influenza.

In the field of cancer immunotherapy, “cancer vaccines” take advantage of the expression of specific markers by cancer cells to direct the immune response and attack the tumor. RNA vaccines against prostate cancer, melanoma, and lung cancer (non-small cell lung cancer) are currently in clinical trials. For instance, six different RNAs against proteins produced in excess in tumor cells were used to formulate a vaccine against lung cancer. By taking advantage of the flexibility of RNA vaccine production, scientists can thus produce a vaccine with different antigens which is consequently better at targeting the tumor cells [11]. In the case of the prostate cancer vaccine, a preliminary study showed that injection of those RNAs foster an immune response in most of the patients. Whether this production of antibodies is sufficient to slow down the tumor progression remain to be determined.

Interestingly, because of the versatility of RNA vaccines, they could be tailored to fit the antigen repertoire of each patient tumor. Tumor cells are very different between patients, and this variability is an ongoing an issue for cancer treatment. An ongoing clinical trial is testing whether RNA vaccines may be effective for addressing variability in melanoma patients: in the trial, each tumor was first sequenced to identify its unique antigen repertoire, and then, a RNA vaccine is tailored to each tumor (Figure 3). This study shows that RNA vaccines could play a major role in this growing field of “personalized medicine” [7]. Moreover, these tailored, on-demand vaccines are practical – the company BioNTech claims that it could be manufactured in 5 months [12]).

RNA vaccines are also being developed to prevent infectious diseases. A vaccine against rabies is currently in clinical trials, while vaccines against influenza, HIV or tuberculosis are still at the research stage. Published results with the influenza vaccine [9] showed promising protection in mice. Indeed, injection of RNA coding for different proteins of the influenza virus induced the production of antibodies, and when the mice were later exposed to the virus, all survived. Similar immune response was observed in ferrets and pigs. All these observations in animals point to a potential use in humans.

The field of RNA vaccines is still nascent. However, their production is flexible and rapid, and recent studies indicate they could be effective against a wide range of infectious diseases and cancers. While their clinical potential in humans remains to be firmly established, RNA vaccines appear to be a promising technology worth watching out for.

#### mRNA vaccines solve bioterrorism

<https://www.hsph.harvard.edu/news/multimedia-article/were-better-off-with-mrna-vaccines/>

#### Bioterror causes extinction.

**Millett & Snyder-Beattie ‘17** [(Piers Millett: Ph.D., Senior Research Fellow, Future of Humanity Institute, University of Oxford. Andrew Snyder-Beattie: M.S., Director of Research, Future of Humanity Institute, University of Oxford.) " Existential Risk and Cost-Effective Biosecurity," Health Security, 15(4), 08-01-2017, https://www.liebertpub.com/doi/full/10.1089/hs.2017.0028] TDI

In the decades to come, advanced bioweapons could **threaten human existence**. Although the **probability** of human extinction from bioweapons **may** be low, the **expected value** of **reducing** the risk could **still** be **large**, since such risks jeopardize the existence of **all future generations**. We provide an overview of biotechnological extinction risk, make some rough initial estimates for how severe the risks might be, and compare the cost-effectiveness of reducing these extinction-level risks with existing biosecurity work. We find that reducing human extinction risk can be more cost-effective than reducing smaller-scale risks, even when using conservative estimates. This suggests that the risks are not low enough to ignore and that more ought to be done to prevent the worst-case scenarios. How worthwhile is it spending resources to study and mitigate the chance of human extinction from biological risks? The risks of such a catastrophe are presumably low, so a skeptic might argue that addressing such risks would be a waste of scarce resources. In this article, we investigate this position using a cost-effectiveness approach and ultimately conclude that the expected value of reducing these risks is large, especially since such risks jeopardize the existence of all future human lives. **Historically, disease events have been responsible for the greatest death tolls** on humanity. The 1918 flu was responsible for more than 50 million deaths,1 while smallpox killed perhaps 10 times that many in the 20th century alone.2 The Black Death was responsible for killing over 25% of the European population,3 while other pandemics, such as the plague of Justinian, are thought to have killed 25 million in the 6th century—constituting over 10% of the world's population at the time.4 It is an open question whether a future pandemic could result in outright human extinction or the irreversible collapse of civilization. A skeptic would have many good reasons to think that existential risk from disease is unlikely. Such a disease would need to spread worldwide to **remote populations**, overcome **rare genetic resistances**, and **evade detection**, cures, and **countermeasures**. Even evolution itself may work in humanity's favor: **Virulence and transmission is often a trade-off**, and so **evolutionary pressures** could push against maximally lethal wild-type pathogens.5,6 While these arguments point to a very small risk of human extinction, they **do not rule** the possibility **out** entirely. Although rare, there are recorded instances of **species going extinct due to disease**—primarily in amphibians, but also in 1 mammalian species of rat on Christmas Island.7,8 There are also **historical examples of large human populations being almost entirely wiped out** by disease, especially when multiple diseases were simultaneously introduced into a population without immunity. The most striking examples of total population collapse include **native American tribes** exposed to European diseases, such as the Massachusett (86% loss of population), Quiripi-Unquachog (95% loss of population), and the Western Abenaki (which suffered a staggering 98% loss of population).9 In the modern context, no single disease currently exists that combines the worst-case levels of transmissibility, lethality, resistance to countermeasures, and global reach. But **many diseases are proof** of principle that **each worst-case attribute can be realized independently**. For example, some diseases exhibit nearly a 100% case fatality ratio in the absence of treatment, such as rabies or septicemic plague. Other diseases have a track record of spreading to virtually every human community worldwide, such as the 1918 flu,10 and seroprevalence studies indicate that other pathogens, such as chickenpox and HSV-1, can successfully reach over 95% of a population.11,12 Under optimal virulence theory, **natural evolution** would be an **unlikely** source for pathogens with the **highest possible levels of transmissibility, virulence, and global reach**. But **advances in biotech**nology might allow the creation of diseases that **combine such traits**. Recent controversy has **already emerged** over a number of **scientific experiments** that resulted in viruses with enhanced **transmissibility**, **lethality**, and/or the ability to overcome **therapeutics**.13-17 Other experiments demonstrated that mousepox could be modified to have a 100% case fatality rate and render a vaccine ineffective.18 In addition to transmissibility and lethality, studies have shown that other disease traits, such as incubation time, environmental survival, and available vectors, could be modified as well.19-21 Although these experiments had scientific merit and were not conducted with malicious intent, their implications are still worrying. This is especially true given that there is also a **long historical track record** of**state-run bioweapon research** applying cutting-edge science and technology to design agents not previously seen in nature. The Soviet bioweapons program developed agents with traits such as enhanced virulence, resistance to therapies, greater environmental resilience, increased difficulty to diagnose or treat, and which caused unexpected disease presentations and outcomes.22 Delivery capabilities have also been subject to the cutting edge of technical development, with Canadian, US, and UK bioweapon efforts playing a critical role in developing the discipline of aerobiology.23,24 While there is no evidence of state-run bioweapons programs directly attempting to develop or deploy bioweapons that would pose an existential risk, the logic of deterrence and **m**utually **a**ssured **d**estruction could create such incentives in more unstable political environments or following a breakdown of the Biological Weapons Convention.25 The **possibility of a war** between great powers could also increase the pressure to use such weapons—during the World Wars, bioweapons were used across multiple continents, with Germany targeting animals in WWI,26 and Japan using plague to cause an epidemic in China during WWII.27

# Case

## F/W

### Permissibility and Presumption Negates:

#### Presumption negates

#### 1 - The aff has infinite prep time

#### 2 - The aff has the first speech which means they set the grounds for the debate

#### 3 - The aff has the last speech which means they get new 2AR weighing and persuasion

#### Statistics don’t prove – this is TOC and debaters don’t frontline their aff more

#### Permissibility Negates:

## Constructivism

### Double-Bind

**Constructivism is in a double-bind, either agents recognize reasons prior to the formation of moral beliefs, which lapses to realism, OR they develop morality from non-moral origins, which undermines their moral authority,**

Russ **Shafer-Landau explains** (Moral Realism: A Defence, CLARENDON PRESS · OXFORD, 2003)

If this is sounding a familiar note, it should. The dilemma pressed against the constructivist is a variation of one ﬁrst found in the Euthyphro. There, the question was whether divine approval constituted the piety of acts, or whether it was simply a good criterion of such acts, their pious nature being constituted by something else. Plato chose the latter option, because the former made divine approval arbitrary, thereby undercutting the goodness of the gods. **If the attitudes of idealized agents are worthy to ﬁx moral truth—if the agents are good in the relevant respect—then these attitudes must be developed in response to reasons. But then the reasons come ﬁrst. So if constructivism is to avoid dignifying the arbitrary choices of idealized agents, and if it is to avoid lapsing into realism, then it must insist that these choices are exemplary because of having been for met through exceptional attentiveness to non-moral reasons. But if the reasons that are constraining the choices of the favoured agents are not moral reasons, it is hard to see why the outcomes of the initial conditions should be deﬁnitive of morality.**

### Collapses to Relativism

#### Practical rationality stems from adhering to “reasons for action,” however, this collapses to relativism since the individual will always be rational in what they perceive as good reasons for action, Wedgwood:

Practical Reason and Desire by Ralph Wedgwood <http://www.mendeley.com/research/practical-reason-and-desire/>

The HTM [Rationality] is a claim about the motivation of action. But what is motivation? Suppose that a person *A* intentionally does something -- for example, x-ing. Then *A*'s 'motivation' for x-ing consists of the set of *A*'s mental states that motivated *A* to x. A set of mental states 'motivates' *A* to x if and only if we can truly give a certain sort of *explanation* of *A*'s intentionally x-ing, by saying that *A* intentionally x-ed precisely because *A* was in those mental states. More specifically, if those mental states were *A*'s motivation for x-ing, then, given that *A* was in those mental states, and given certain dispositions that are entirely intelligible to *A*, it is entirely intelligible and unsurprising that *A* intentionally x-ed. [Replaced variable f with x throughout]

### Leads to Util

#### Respecting rationality as the source of morality means maximization

Cummiskey 90  
[David Cummiskey, Kantian Consequentialism, Ethics 100 (April 1990), University of Chicago.<http://www.jstor.org/stable/2381810>]   
 In the next section, I will defend this interpretation of the duty of beneficence. For the sake of argument, however, let us first simply assume that beneficence does not require significant self-sacrifice and see what follows. Although Kant is unclear on this point, we will assume that significant self-sacrifices are supererogatory. Thus, **if I must harm one in order to save many, the individual whom I will harm by my action is not morally required to affirm the action.** On the other hand, I have a duty to do all I can for those in need. As a consequence I am faced with a dilemma: **if I act I harm a person in a way that a rational being need not consent to; if I fail to act, then I fail to do my duty to those in need and thereby fail to promote an objective end.** Faced with such a choice, which horn of the dilemma is more consistent with the formula of the end-in-itself? We must not obscure the issue by characterizing this type of case as the sacrifice of individuals for some abstract "social entity." It is not a question of some persons having to bear the cost for some elusive "overall social good." Instead, the question is whether some persons must bear the inescapable cost for the sake of other persons. Nozick, for example, argues that "to use a person in this way does not sufficiently respect and take account of the fact that he is a separate person, that his is the only life he has." Why, however, is this not equally true of all those that we do not save through our failure to act? **By emphasizing solely the one who must bear the cost if we act, one fails to sufficiently respect and take account of the many other separate persons, each with only one life, who** will **bear the cost of our inaction**. In such a situation, what would a conscientious Kantian agent, an agent motivated by the unconditional value of rational beings, choose? We have a duty to promote the conditions necessary for the existence of rational beings, but both **choosing to act and choosing not to act will cost the life of a rational being.** Since the basis of Kant's principle is "rational nature exists as an end-in-itself," the reasonable solution to such a dilemma involves promoting, insofar as one can, the conditions necessary for rational beings. **If I sacrifice some for the sake of other rational beings, I do not use them arbitrarily and I do not deny the unconditional value of rational beings.** Persons may have "dignity, an unconditional and incomparable value" that transcends any market value, but, **as rational beings, persons** also **have a fundamental equality which dictates that some must sometimes give way for the sake of others.** **The formula of the end-in-itself** thus **does not support the view that we may never force another to bear some cost in order to benefit others**. If one focuses on **the equal value of all rational beings**, then equal consideration **dictates that one sacrifice some to save many.**

### Universal Freedom:

#### Util is a prerequisite to Freedom, If we don’t value pleasure and disvalue pain, we have no basis

Is ought gap;

#### Ought indicates a moral obligation per common usage

Chrisman 12 Chrisman, Matthew [The Department of Philosophy in The School of Philosophy Psychology and Language]. "‘Ought’and Control." Australasian Journal of Philosopy 90.3 (2012): 433-451.

Ethical theorists are interested in the meaning of the word ‘ought’ largely because the paradigmatic way in English to state general moral principles as well as specific practical conclusions is with an ought-sentence. For example, Kant’s initial statement of the Categorical Imperative reads: ‘I ought never to act except in such a way that I could also will that my maxim should become a universal law’ [1785/1985: 402].1 And one of the most famous claims of applied ethics is Singer’s contention that ‘we ought, morally, to be working full time to relieve great suffering of the sort that occurs as a result of famine or other disasters’ [1972: 238]. Although we can state ethical principles and conclusions in other ways, I think it is no mistake that we often reach for ‘ought’ to do so. But what does ‘ought’ mean?