## 1

#### Our interpretation is that the resolution should determine the division of affirmative and negative ground.

#### “Resolved” means enactment of a law.

Words and Phrases 64 Words and Phrases Permanent Edition (Multi-volume set of judicial definitions). “Resolved”. 1964.

Definition of the word **“resolve,”** given by Webster is “to express an opinion or determination by resolution or vote; as ‘it was resolved by the legislature;” It **is** of **similar** force **to the word “enact,”** which is defined by Bouvier as **meaning “to establish by law”.**

#### Reduce means to diminish in size

Michigan District Court 11 “SAGINAW OFFICE SERVICE, INC., Plaintiff, v. BANK OF AMERICA, N.A., Defendant. Civil Action No. 09-CV-13889 UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF MICHIGAN, SOUTHERN DIVISION,” Lexis

In determining whether the words "reduce" and "adjust" are ambiguous, the Court is directed to consider the ordinary meanings of the words, Rory, 703 N.W.2d at 28, and to harmonize [\*11] the disputed terms with other parts of the contract, Royal, 706 N.W.2d at 432 ("construction should be avoided that would render any part of the contract surplusage or nugatory"). "When determining the common, ordinary meaning of a word or phrase, consulting a dictionary is appropriate." Stanton v. City of Battle Creek, 466 Mich. 611, 647 N.W.2d 508 (Mich. 2002). The Court finds that the plain meanings of these terms do not unambiguously support the Bank's position. The dictionary definition of "adjust" is to "adapt" or "to bring to a more satisfactory state." Webster's Third New Int'l Dictionary 27 (2002) ("Webster's"). This is a fairly broad definition, which may be subject to, alternatively, narrower or more expansive scope. To say that the complete elimination of a schedule brings it to a more satisfactory state is undoubtedly an expansive viewof adjustment. It is the Court's duty to determine the intent of the contracting parties from the language of the contract itself, Rory, 703 N.W.2d at 30 ("the intent of the contracting parties is best discerned by the language actually used in the contract"), and in this case, it cannot unambiguously be said that the sense in which the parties used these [\*12] terms embraces the Bank's more expansive definition. Likewise, "reduce" means "to diminish in size, amount, extent, or number," Webster's, at 1905, but the term does not, in the context of the TSA, unambiguously embody an expansive scope that views complete deletion as a subset of diminution.

#### Medicine refers to a substance used in the treatment of disease

Merriam Webster ND [“Medicine.” Merriam-Webster.com Dictionary, Merriam-Webster, Accessed 27 Jun. 2021 [https://www.merriam-webster.com/dictionary/medicine.](https://www.merriam-webster.com/dictionary/medicine.%20)  Ww

Definition of medicine¶ 1a : a substance or preparation used in treating disease cough medicine¶ b : something that affects well-being he's bad medicine— Zane Grey¶ 2a : the science and art dealing with the maintenance of health and the prevention, alleviation, or cure of disease She's interested in a career in medicine.¶ b : the branch of medicine concerned with the nonsurgical treatment of disease¶ 3 : a substance (such as a drug or potion) used to treat something other than disease

#### Governments reduce intellectual property protections. Lindsey 6/3

Brink Lindsey, 6-3-2021, "Why intellectual property and pandemics don’t mix," Brookings, https://www.brookings.edu/blog/up-front/2021/06/03/why-intellectual-property-and-pandemics-dont-mix/

When we take the longer view, we can see a fundamental mismatch between the policy design of intellectual property protection and the policy requirements of effective pandemic response. Although patent law, properly restrained, constitutes one important element of a well-designed national innovation system, the way it goes about encouraging technological progress is singularly ill-suited to the emergency conditions of a pandemic or other public health crisis. Securing a TRIPS waiver for COVID-19 vaccines and treatments would thus establish a salutary precedent that, in emergencies of this kind, governments should employ other, more direct means to incentivize the development of new drugs.

#### Vote neg for predictable limits—post-facto topic adjustment structurally favors the aff by manipulating the balance of prep which is anchored around the resolution as a stasis point. Not debating the topic allows someone to specialize in one area of the library for 4 years giving them a huge edge over people who switch research focus ever 2 months, which means their arguments are presumptively false because they haven’t been subject to well-researched scrutiny

#### 2 impacts:

#### First is fairness—debate is fundamentally a game which requires both sides to have a relatively equal shot at winning and is necessary for any benefit to the activity. That outweighs:

#### A] decision-making: every argument concedes to the validity of fairness i.e. that the judge will make a fair decision based on the arguments presented. This means if they win fairness bad vote neg on presumption because you have no obligation to fairly evaluate their arguments.

#### B] probability: voting aff can’t solve any of their impacts but it can solve ours. All the ballot does is tell tab who won which can’t stop any violence but can resolve the fairness imbalance in this particular debate.

#### Second is switch side and idea-testing --- only a limited topic that leaves a role for the negative allows contestation and second-order testing that overcomes polarization. Switching sides forces them to scrutinize their own beliefs, which is valuable for developing and defending their own convictions more robustly.

Poscher 16

Ralf Poscher, Diat the Institute for Staatswissenschaft and Philosophy of Law at the University of Freiburg “Why We Argue About the Law: An Agonistic Account of Legal Disagreement”, Metaphilosophy of Law, Tomasz Gizbert-Studnicki/Adam Dyrda/Pawel Banas (eds.), Hart Publishing. 2016.

Hegel’s dialectical thinking powerfully exploits the idea of negation. It is a central feature of spirit and consciousness that they have the power to negate. The spirit “is this power only by looking the negative in the face and tarrying with it. This […] is the magical power that converts it into being.”102 The tarrying with the negative is part of what Hegel calls the “labour of the negative”103. In a loose reference to this Hegelian notion Gerald Postema points to yet another feature of disagreements as a necessary ingredient of the process of practical reasoning. Only if our reasoning is exposed to contrary arguments can we test its merits. We must go through the “labor of the negative” to have trust in our deliberative processes.104

This also holds where we seem to be in agreement. Agreement without exposure to disagreement can be deceptive in various ways. The first phenomenon Postema draws attention to is the group polarization effect. When a group of like‐minded people deliberates an issue, informational and reputational cascades produce more extreme views in the process of their deliberations.105 The polarization and biases that are well documented for such groups106 can be countered at least in some settings by the inclusion of dissenting voices. In these scenarios, disagreement can be a cure for dysfunctional deliberative polarization and biases.107 A second deliberative dysfunction mitigated by disagreement is superficial agreement, which can even be manipulatively used in the sense of a “presumptuous ‘We’”108. Disagreement can help to police such distortions of deliberative processes by challenging superficial agreements. Disagreements may thus signal that a deliberative process is not contaminated with dysfunctional agreements stemming from polarization or superficiality. Protecting our discourse against such contaminations is valuable even if we do not come to terms. Each of the opposing positions will profit from the catharsis it received “by looking the negative in the face and tarrying with it”.

These advantages of disagreement in collective deliberations are mirrored on the individual level. Even if the probability of reaching a consensus with our opponents is very low from the beginning, as might be the case in deeply entrenched conflicts, entering into an exchange of arguments can still serve to test and improve our position. We have to do the “labor of the negative” for ourselves. Even if we cannot come up with a line of argument that coheres well with everybody else’s beliefs, attitudes and dispositions, we can still come up with a line of argument that achieves this goal for our own personal beliefs, attitudes and dispositions. To provide ourselves with the most coherent system of our own beliefs, attitudes and dispositions is – at least in important issues – an aspect of personal integrity – to borrow one of Dworkin’s favorite expressions for a less aspirational idea.

In hard cases we must – in some way – lay out the argument for ourselves to figure out what we believe to be the right answer. We might not know what we believe ourselves in questions of abortion, the death penalty, torture, and stem cell research, until we have developed a line of argument against the background of our subjective beliefs, attitudes and dispositions. In these cases it might be rational to discuss the issue with someone unlikely to share some of our more fundamental convictions or who opposes the view towards which we lean. This might even be the most helpful way of corroborating a view, because we know that our adversary is much more motivated to find a potential flaw in our argument than someone with whom we know we are in agreement. It might be more helpful to discuss a liberal position with Scalia than with Breyer if we want to make sure that we have not overlooked some counter‐argument to our case.

It would be too narrow an understanding of our practice of legal disagreement and argumentation if we restricted its purpose to persuading an adversary in the case at hand and inferred from this narrow understanding the irrationality of argumentation in hard cases, in which we know beforehand that we will not be able to persuade. Rational argumentation is a much more complex practice in a more complex social framework. Argumentation with an adversary can have purposes beyond persuading him: to test one’s own convictions, to engage our opponent in inferential commitments and to persuade third parties are only some of these; to rally our troops or express our convictions might be others. To make our peace with Kant we could say that “there must be a hope of coming to terms” with someone though not necessarily with our opponent, but maybe only a third party or even just ourselves and not necessarily only on the issue at hand, but maybe through inferential commitments in a different arena.

f) The Advantage Over Non‐Argumentative Alternatives

It goes without saying that in real world legal disagreements, all of the reasons listed above usually play in concert and will typically hold true to different degrees relative to different participants in the debate: There will be some participants for whom our hope of coming to terms might still be justified and others for whom only some of the other reasons hold and some for whom it is a mixture of all of the reasons in shifting degrees as our disagreements evolve. It is also apparent that, with the exception of the first reason, the rationality of our disagreements is of a secondary nature. The rational does not lie in the discovery of a single right answer to the topic of debate, since in hard cases there are no single right answers. Instead, our disagreements are instrumental to rationales which lie beyond the topic at hand, like the exploration of our communalities or of our inferential commitments. Since these reasons are of this secondary nature, they must stand up to alternative ways of settling irreconcilable disagreements that have other secondary reasons in their favor – like swiftness of decision making or using fewer resources. Why does our legal practice require lengthy arguments and discursive efforts even in appellate or supreme court cases of irreconcilable legal disagreements? The closure has to come by some non‐argumentative mean and courts have always relied on them. For the medieval courts of the Germanic tradition it is bequeathed that judges had to fight it out literally if they disagreed on a question of law – though the king allowed them to pick surrogate fighters.109 It is understandable that the process of civilization has led us to non‐violent non‐ argumentative means to determine the law. But what was wrong with District Judge Currin of Umatilla County in Oregon, who – in his late days – decided inconclusive traffic violations by publicly flipping a coin?110 If we are counting heads at the end of our lengthy argumentative proceedings anyway, why not decide hard cases by gut voting at the outset and spare everybody the cost of developing elaborate arguments on questions, where there is not fact of the matter to be discovered?

#### Third—small schools disad: under-resourced are most adversely effected by a massive, unpredictable caselist which worsens structural disparities

#### Topical version—they read their own TVA for themselves (Chidi 8, Timmermans, Shabalala,

#### Disads to the TVA prove there are negative ground and that it’s a contestable stasis point which means we don’t have to “solve” the whole aff

#### Reject the team—T is question of models of debate and the damage to our strategy was already done

#### Competing interps—they have to proactively to justify their model and reasonability links to our offense

#### No rvis or impact turns—it’s their burden to prove their topical. Beating back T doesn’t prove their advocacy is good

#### Indepdently, new non-topical AFFs are a reason to reject the team---literally infinite potential topics for discussion coupled with lack of disclosure means that being prepared is structurally impossible.

### 2

#### Biotech industry strong now.

Cancherini et al. 4/30 [(Laura, Engagement Manager @ McKinsey & Company, Joseph Lydon, Associate Partner @ McKinsey & Company, Jorge Santos Da Silva, Senior Partner at McKinsey & Company, and Alexandra Zemp, Partner at McKinsey & Company), “What’s ahead for biotech: Another wave or low tide?“, McKinsey & Company, 4-30-2021, <https://www.mckinsey.com/industries/pharmaceuticals-and-medical-products/our-insights/whats-ahead-for-biotech-another-wave-or-low-tide>] TDI

As the pandemic spread across the globe in early 2020, biotech leaders were initially pessimistic, reassessing their cash position and financing constraints. When McKinsey and BioCentury interviewed representatives from 106 biotech companies in May 2020,4 half of those interviewed were expecting delays in financing, and about 80 percent were tight on cash for the next two years and considering trade-offs such as deferring IPOs and acquisitions. Executives feared that valuations would decline because of lower revenue projections and concerns about clinical-trial delays, salesforce-effectiveness gaps, and other operational issues.

Belying this downbeat mood, biotech has in fact had one of its best years so far. By January 2021, venture capitalists had invested some 60 percent more than they had in January 2020, with more than $3 billion invested worldwide in January 2021 alone.5 IPO activity grew strongly: there were 19 more closures than in the same period in 2020, with an average of $150 million per raise, 17 percent more than in 2020. Other deals have also had a bumper start to 2021, with the average deal size reaching more than $500 million, up by more than 66 percent on the 2020 average (Exhibit 3).6

What about SPACs?

The analysis above does not include special-purpose acquisition companies (SPACs), which have recently become significant in IPOs in several industries. Some biotech investors we interviewed believe that SPACs represent a route to an IPO. How SPACs will evolve remains to be seen, but biotechs may be part of their story.

Fundamentals continue strong

When we asked executives and investors why the biotech sector had stayed so resilient during the worst economic crisis in decades, they cited innovation as the main reason. The number of assets transitioning to clinical phases is still rising, and further waves of innovation are on the horizon, driven by the convergence of biological and technological advances.

In the present day, many biotechs, along with the wider pharmaceutical industry, are taking steps to address the COVID-19 pandemic. Together, biotechs and pharma companies have [more than 250 vaccine candidates in their pipelines](https://www.mckinsey.com/industries/pharmaceuticals-and-medical-products/our-insights/on-pins-and-needles-will-covid-19-vaccines-save-the-world), along with a similar number of therapeutics. What’s more, the crisis has shone a spotlight on pharma as the public seeks to understand the roadblocks involved in delivering a vaccine at speed and the measures needed to maintain safety and efficacy standards. To that extent, the world has been living through a time of mass education in science research and development.

Biotech has also benefited from its innate financial resilience. Healthcare as a whole is less dependent on economic cycles than most other industries. Biotech is an innovator, actively identifying and addressing patients’ unmet needs. In addition, biotechs’ top-line revenues have been less affected by lockdowns than is the case in most other industries.

Another factor acting in the sector’s favor is that larger pharmaceutical companies still rely on biotechs as a source of innovation. With the [top dozen pharma companies](https://www.mckinsey.com/business-functions/m-and-a/our-insights/a-new-prescription-for-m-and-a-in-pharma) having more than $170 billion in excess reserves that could be available for spending on M&A, the prospects for further financing and deal making look promising.

For these and other reasons, many investors regard biotech as a safe haven. One interviewee felt it had benefited from a halo effect during the pandemic.

More innovation on the horizon

The investors and executives we interviewed agreed that biotech innovation continues to increase in quality and quantity despite the macroeconomic environment. Evidence can be seen in the accelerating pace of assets transitioning across the development lifecycle. When we tracked the number of assets transitioning to Phase I, Phase II, and Phase III clinical trials, we found that Phase I and Phase II assets have transitioned 50 percent faster since 2018 than between 2013 and 2018, whereas Phase III assets have maintained much the same pace. There could be many reasons for this, but it is worth noting that biotechs with Phase I and Phase II assets as their lead assets have accounted for more than half of biotech IPOs. Having an early IPO gives a biotech earlier access to capital and leaves it with more scope to concentrate on science.

Looking forward, the combination of advances in biological science and accelerating developments in technology and artificial intelligence has the potential to take innovation to a new level. A [recent report](https://www.mckinsey.com/industries/pharmaceuticals-and-medical-products/our-insights/the-bio-revolution-innovations-transforming-economies-societies-and-our-lives) from the McKinsey Global Institute analyzed the profound economic and social impact of biological innovation and found that biomolecules, biosystems, biomachines, and biocomputing could collectively produce up to 60 percent of the physical inputs to the global economy. The applications of this “Bio Revolution” range from agriculture (such as the production of nonanimal meat) to energy and materials, and from consumer goods (such as multi-omics tailored diets) to a multitude of health applications.

#### IPR key to innovation.

Bacchus 20 [(James, member of the Herbert A. Stiefel Center for Trade Policy Studies, the Distinguished University Professor of Global Affairs and director of the Center for Global Economic and Environmental Opportunity at the University of Central Florida. He was a founding judge and was twice the chairman—the chief judge—of the highest court of world trade, the Appellate Body of the World Trade Organization in Geneva, Switzerland) "An Unnecessary Proposal: A WTO Waiver of Intellectual Property Rights for COVID-19 Vaccines," Cato Institute, 12-16-2020, https://www.cato.org/free-trade-bulletin/unnecessary-proposal-wto-waiver-intellectual-property-rights-covid-19-vaccines] TDI

At the heart of this emerging trade debate is a belief by many people worldwide that all medicines should be “global public goods.” There is little room in such a belief for consideration of any rights to IP. As one group of United Nations human rights experts expressed: “There is no room for … profitability in decision‐​making about access to vaccines, essential tests and treatments, and all other medical goods, services and supplies that are at the heart of the right to the highest attainable standard of health for all.”[16](https://www.cato.org/free-trade-bulletin/unnecessary-proposal-wto-waiver-intellectual-property-rights-covid-19-vaccines#_ednref16)

This view is myopic. Subordinating IP rights temporarily to pressing public needs during a pandemic or other global health emergency is one thing. Eliminating any consideration of “profitability” in all policymaking relating to “access to vaccines, essential tests and treatments, and all other medical goods, services and supplies” is quite another.[17](https://www.cato.org/free-trade-bulletin/unnecessary-proposal-wto-waiver-intellectual-property-rights-covid-19-vaccines#_ednref17) To be sure, there is a superficial moral appeal in such a view. But does this moral appeal hold up if such a “human rights” approach does not result in meeting those urgent public needs?

With the belief that medicines should be “public goods,” there is literally no support in some quarters for the application of the WTO TRIPS Agreement to IP rights in medicines. Any protection of the IP rights in such goods is viewed as a violation of human rights and of the overall public interest. This view, though, does not reflect the practical reality of a world in which many medicines would simply not exist if it were not for the existence of IP rights and the protections they are afforded.

Technically, IP rights are exceptions to free trade. A long‐​standing general discussion in the WTO has been about when these exceptions to free trade should be allowed and how far they should be extended. The continuing debate over IP rights in medicines is only the most emotional part of this overall conversation. Because developed countries have, historically, been the principal sources of IP rights, this lengthy WTO dispute has largely been between developed countries trying to uphold IP rights and developing countries trying to limit them. The debate over the discovery and the distribution of vaccines for COVID-19 is but the latest global occasion for this ongoing discussion.

The primary justification for granting and protecting IP rights is that they are incentives for innovation, which is the main source for long‐​term economic growth and enhancements in the quality of human life. IP rights spark innovation by “enabling innovators to capture enough of the benefits of their own innovative activity to justify taking considerable risks.”[18](https://www.cato.org/free-trade-bulletin/unnecessary-proposal-wto-waiver-intellectual-property-rights-covid-19-vaccines#_ednref18) The knowledge from innovations inspired by IP rights spills over to inspire other innovations. The protection of IP rights promotes the diffusion, domestically and internationally, of innovative technologies and new know‐​how. Historically, the principal factors of production have been land, labor, and capital. In the new pandemic world, perhaps an even more vital factor is the creation of knowledge, which adds enormously to “the wealth of nations.” Digital and other economic growth in the 21st century is increasingly ideas‐​based and knowledge intensive. Without IP rights as incentives, there would be less new knowledge and thus less innovation.

In the short term, undermining private IP rights may accelerate distribution of goods and services—where the novel knowledge that went into making them already exists. But in the long term, undermining private IP rights would eliminate the incentives that inspire innovation, thus preventing the discovery and development of knowledge for new goods and services that the world needs. This widespread dismissal of the link between private IP rights and innovation is perhaps best reflected in the fact that although the United Nations Sustainable Development Goals for 2030 aspire to “foster innovation,” they make no mention of IP rights.[19](https://www.cato.org/free-trade-bulletin/unnecessary-proposal-wto-waiver-intellectual-property-rights-covid-19-vaccines#_ednref19)

As Stephen Ezell and Nigel Cory of the Information Technology and Innovation Foundation wrote, “A fundamental fault line in the debate over intellectual property pertains to the need to achieve a reasoned balance between access and exclusive rights.”[20](https://www.cato.org/free-trade-bulletin/unnecessary-proposal-wto-waiver-intellectual-property-rights-covid-19-vaccines#_ednref20) This fault line is much on display in the WTO rules on IP rights. These rules recognize that “intellectual property rights are private rights” and that rules and disciplines are necessary for “the provision of effective and appropriate means for the enforcement of trade‐​related intellectual property rights.”[21](https://www.cato.org/free-trade-bulletin/unnecessary-proposal-wto-waiver-intellectual-property-rights-covid-19-vaccines#_ednref21) Yet, where social and economic welfare is at stake, WTO members have sought to strike a balance in these rules between upholding IP rights and fulfilling immediate domestic needs.

#### Biopharmaceutical innovation is key to prevent future pandemics and bioterror.

Marjanovic and Feijao 20 [(Sonja Marjanovic, Ph.D., Judge Business School, University of Cambridge. Carolina Feijao, Ph.D. in biochemistry, University of Cambridge; M.Sc. in quantitative biology, Imperial College London; B.Sc. in biology, University of Lisbon.) "How to Best Enable Pharma Innovation Beyond the COVID-19 Crisis," RAND Corporation, 05-2020, https://www.rand.org/pubs/perspectives/PEA407-1.html] TDI

As key actors in the healthcare innovation landscape, pharmaceutical and life sciences companies have been called on to develop medicines, vaccines and diagnostics for pressing public health challenges. The COVID-19 crisis is one such challenge, but there are many others. For example, MERS, SARS, Ebola, Zika and avian and swine flu are also infectious diseases that represent public health threats. Infectious agents such as anthrax, smallpox and tularemia could present threats in a bioterrorism context.1 The general threat to public health that is posed by antimicrobial resistance is also well-recognised as an area in need of pharmaceutical innovation. Innovating in response to these challenges does not always align well with pharmaceutical industry commercial models, shareholder expectations and competition within the industry. However, the expertise, networks and infrastructure that industry has within its reach, as well as public expectations and the moral imperative, make pharmaceutical companies and the wider life sciences sector an indispensable partner in the search for solutions that save lives. This perspective argues for the need to establish more sustainable and scalable ways of incentivising pharmaceutical innovation in response to infectious disease threats to public health. It considers both past and current examples of efforts to mobilise pharmaceutical innovation in high commercial risk areas, including in the context of current efforts to respond to the COVID-19 pandemic. In global pandemic crises like COVID-19, the urgency and scale of the crisis – as well as the spotlight placed on pharmaceutical companies – mean that contributing to the search for effective medicines, vaccines or diagnostics is essential for socially responsible companies in the sector. 2 It is therefore unsurprising that we are seeing industry-wide efforts unfold at unprecedented scale and pace. Whereas there is always scope for more activity, industry is currently contributing in a variety of ways. Examples include pharmaceutical companies donating existing compounds to assess their utility in the fight against COVID19; screening existing compound libraries in-house or with partners to see if they can be repurposed; accelerating trials for potentially effective medicine or vaccine candidates; and in some cases rapidly accelerating in-house research and development to discover new treatments or vaccine agents and develop diagnostics tests.3,4 Pharmaceutical companies are collaborating with each other in some of these efforts and participating in global R&D partnerships (such as the Innovative Medicines Initiative effort to accelerate the development of potential therapies for COVID-19) and supporting national efforts to expand diagnosis and testing capacity and ensure affordable and ready access to potential solutions.3,5,6 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.

#### 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

### 1NC – Presumption

#### The role of the ballot is to vote for the better debater—anything else is arbitrary, self-serving, and begs the question of the rest of the debate

#### You should vote negative on presumption – the affirmative’s advocacy does not solve the harms they’ve isolated for two reasons

#### A – Systems – the 1AC argues that material institutions create the social realities that replicate violence but ceding the state refuses to alter these conditions

#### B – Spillover – the aff assumes that its advocacy of a certain affect is sufficient to result in the liberation of the flesh BUT they are missing a robust internal link to solving oppression inside OR outside the round

### 1NC – Impact Turn

#### Decolonization collapses domestic ICBM installations---that guarantees nuke war. ICBM’s are critical to deterrence and their spatial distribution on the mainland is key.

Baroudos 16. (Constance Baroudos is Vice President of the Lexington Institute. Her current research interests include ballistic-missile defense, nuclear strategy, European security, and the Greek financial crisis. Baroudos has been interviewed, published or quoted by the Associated Press, Washington Post, CBS, NBC, ABC, CCTV, Voice of America, Defense News, Air Force Times, and RealClear Defense. ICBMs: America's Nuclear 911 Force Remains Crucial to Deterrence. April 14, 2016. nationalinterest.org/blog/the-buzz/icbms-americas-nuclear-911-force-remains-crucial-deterrence-15786)

**The only defense the** United States **has against a Russian nuclear attack is the** threat of retaliation. **To keep that** threat credible, **the military maintains a “triad” of land-based missiles, sea-based missiles and bombers** that would be nearly impossible to destroy in a surprise attack. Minuteman III intercontinental ballistic missiles (ICBMs) **stationed in the** central U.S. **that make up part of the American nuclear deterrent remain** critical to national security**.** **Eliminating ICBMs** as some have proposed **would weaken America’s nuclear deterrent that protects its homeland and allies from a** nuclear first strike. **ICBMs are deployed in underground silos at three** U.S. bases. Current weapons were fielded in 1970 with a planned service life of 10 years, but have lasted over 40 years because they have been refurbished many times. The U.S. cannot continue to sustain its Cold War ICBM force any longer because it is antiquated and hard to maintain. Thus, the Air Force will develop a new missile as part of the ground-based strategic deterrent program that will be deployed in the 2027 timeframe. The Air Force’s initial proposal calls for 642 missiles of which 400 would be operationally deployed until the 2070s. But the ICBM force is facing controversy because funding for its modernization will take place simultaneously with replacements of other legs of the Cold War triad. While modernizing **ICBMs** is not cheap, they **are the least expensive component of the nuclear deterrent**, **and** they **provide many** benefits **that the** other legs do not**.** **ICBMs are on** constant alert which shortens execution of a president’s decision to launch weapons in response to a surprise attack. **If ICBMs were eliminated, an enemy would only need to strike a small number of targets to degrade the U.S. strategic posture since there are only three bases for nuclear-capable bombers and two bases for ballistic-missile submarines**. In contrast, **each hardened ICBM silo would have to be** targeted separately. **While nuclear submarines are undetectable** in the ocean today**, a tech**nological breakthrough **could occur that would make the oceans less opaque.** **The sea-based leg might be weakened and could be at risk of being destroyed by conventional forces**. Thus, **the** land **leg would increase in significance**. Eliminating ICBMs **might motivate potential adversaries to try even harder to develop the capability to locate nuclear submarines underwater**. Consider what countries are doing in other parts of the world today to understand the importance of ICBMs to security. **Moscow is modernizing its ICBM force to carry 10 nuclear warheads each. Beijing tested its newest road-mobile ICBM twice last year** – road mobile ICBMs increase survivability because they do not have set locations for an enemy to target. **North Korea recently launched its sixth long-range rocket test that placed a satellite into orbit (testing rockets through satellite launches provides invaluable data for** potential **future ICBMs). Deterrence** is effective because it **causes the enemy to fear a massive retaliatory response**; ICBMs in particular **ensure an adversary’s** objectives are beyond reach **because they are** on alert **and** cannot be destroyed by conventional forces. A new ICBM is an expensive but essential investment that will prevent a potential aggressor from launching a nuclear first strike and ensure these fearsome weapons are never used.

#### Nuclear deterrence is increasing now---that’s key to balancing Russia, China and other global threats---decreases cause aggressive preemptive strikes and nuclear war.

Huessy 17. (Peter Huessy is President of his own defense consulting firm, GeoStrategic Analysis, founded in 1981, and was the senior defense consultant at the National Defense University Foundation for 22 years. He is now the National Security Fellow at the AFPC, and Senior Defense Consultant at the Air Force Association. Mr. Huessy has served as an expert defense and national security analyst for over 36 years, helping his clients cover congressional activities, while monitoring budget and policy developments on terrorism, counter-terrorism, immigration, state-sponsored terrorism, missile defense, especially US-Israeli joint defense efforts, nuclear deterrence, arms control, proliferation, as well as tactical and strategic air, airlift, space and nuclear matters and such state and non-state actors as North Korea, China, Iran, Syria, Venezuela and Hezbollah, Hamas and Al Qaeda. This also includes monitoring activities of think tanks, non-governmental organizations, and other US government departments, as well as projecting future actions of Congress in this area. His specialty is developing and implementing public policy campaigns to secure support for important national security objectives. The Requirement for a Nuclear Triad: Strategic Stability and the Critical Value of America’s ICBMs. January 10, 2017. https://www.realcleardefense.com/articles/2017/01/11/strategic\_stability\_and\_the\_critical\_value\_of\_americas\_icbms\_110614.html)

**Russia and China are both markedly improving their nuclear forces at a pace not seen even during the height of the Cold War**. Russian President **Putin** has **called for continued** such **modernization**, **describing Russian nuclear forces as already sixty percent modernized and the** strongest in the world. **Russia also has a multi-thousand advantage in tactical or theater nuclear weapons** (not subject to arms control limits) which further complicates U.S. and allied deterrent policy. What then should be the U.S. response? **One former Secretary of Defense has argued that the U.S. should not seek to match the Russian modernization** even though both countries are parties to the New Start treaty that caps strategic nuclear weapons at 1550. Other disarmers argue that despite the dramatic drop in casualties from conventional war in the Post World War II era, there is nothing definitive to conclude that nuclear deterrence has kept the nuclear-armed superpowers from major war for the past seventy years, compared to the 1914-1945 period. Still, others have concluded that nuclear deterrence plays a minor role in today’s strategic stability and a fully modernized force is not needed. **Are these assertions true? My analysis points** to the need for a full modernization of our nuclear enterprise especially going forward with the ground-based strategic deterrent or ICBM modernization effort. Despite much wishful thinking, nuclear weapons remain critical to deterrence, and as such, **the new administration should definitely “**greatly strengthen and expand**” the capability of our nuclear deterrent forces as called for by the President-elect. This is consistent with the current administration’s nuclear modernization plan as supported in the past few defense bills that have passed through Congress.** Moreover, **such a view is also reflected in the current full year’s defense appropriations bill pending in Congress which calls for fully modernizing our nuclear deterrent enterprise**. **A modernized U.S. deterrent—if completed promptly, especially in the face of serious cumulative nuclear threats—will have** more accurate ICBMs, a penetrating stealth strategic bomber, and a more survivable ballistic missile submarine. **All elements would thus be strengthened and their nuclear deterrent capability expanded**, even while Russia and U.S. warheads remain capped at the 2010 U.S.-Russian New Start treaty level of 1550 warheads. Similarly, in the 1980’s the Reagan administration proposed significant reductions in nuclear weapons, but simultaneously pursued an across the board modernization of our deterrent. **Deterrence does not just happen automatically**. **The ability of the United States to stop an adversary from seeking to use, or credibly threaten to use nuclear weapons against the American homeland, our forces overseas and our allies requires a careful, well-thought out deterrent strategy and a companion acquisition plan that modernizes the entire nuclear enterprise.** The added benefit is that **a sound deterrent also can prevent major conventional conflict between the nuclear-armed powers as it has for the past seventy years.** Unfortunately, for the past three decades, the United States has delayed nuclear modernization efforts to the point that we now have the oldest nuclear inventory in the history of our nation. When replaced, our B-52 bombers will be over 70 years old, our submarine hulls will have 42 years in service (a record), and our land-based missiles will be approaching half a century since they were first deployed in 1970. Geriatric nuclear weapon systems undermine the credibility of our nuclear force, weakens deterrence, and puts in doubt our defense strategy. While nuclear critics support some **modest modernization**, **we should not be fooled that such support is adequate to maintain deterrence**. These critics are pushing a disarmament agenda including across the board unilateral curtailment of our nuclear deterrent. That agenda involves three stated objectives that include: to save money; to avoid the possible misuse of our nuclear weapons in a crisis; and to “stop the arms race.” On the surface, each of these goals may appear unobjectionable. However, when examined further, these objectives hide a more ambitious agenda to significantly disarm U.S. nuclear deterrence. If implemented, **the very geostrategic instability disarmament advocates seek to avoid goes up dramatically; as does** the likelihood that nuclear weapons would be used against the United States and its allies in a crisis**. By seeking to lessen the role of nuclear weapons in U.S. deterrent policy, and significantly reduce our forces flexibility, as the disarmament agenda advocates, would stimulate our adversaries such as Russia and China to widen the role of nuclear weapons in their own strategies,** which is exactly what they have done. For example, the **nuclear critics would stop building the new air-launched cruise missile for the new B-21 Raider bomber, eliminate all ICBMs, and delay and reduce the construction of new submarines**. U.S. warhead service life extension programs would also be curtailed, and our overall deployed strategic nuclear arsenal would be commensurately reduced to more than one-third below the Russian deployed level. Overall **our nuclear assets would** unilaterally shrinkby ninety-seven percent. These are all bad ideas that increase the likelihood of nuclear conflict, not reduce it. The current nuclear cruise missiles are reaching the end of their service life and need to be replaced. If they are not, the U.S. would not have the added deterrent flexibility the cruise missile adds to our strategic bomber force. Cutting back to 8-10 submarines is a bad idea as well. The remaining submarines deployed at sea would be too few to carry out the current deterrent mission requirements, and we might very well have to eliminate one of our two strategic nuclear submarine bases to sustain their operation economically. Some disarmament advocates have sought to remedy this acknowledged shortfall in their plan. One suggested option would add the warheads from submarines not built to those remaining in the inventory—to maintain the notional number needed for mission requirements. This does not work either. The added weight associated with placing additional warheads on each sub-based missile reduces the range and target coverage of our submarine’s missiles. Consequently, to reach their targets, the submarines would have to patrol closer to our adversary’s territory, thus reducing their patrol area and making enemy detection easier. Some ICBM critics argue that the U.S. should simply sustain a sharply reduced number of ICBMs and not modernize them. Such a plan also has numerous and dangerous drawbacks. The cost of maintaining the older missiles through their service life exceeds the cost of modernization. Why spend more money than necessary while maintaining a less capable force that will not meet the established national deterrent strategy and has to be replaced soon anyway? However, the most radical of disarmament objectives is to eliminate the U.S. ICBM force of 450 Minuteman silos and their associated **missiles. Eliminating Minuteman missiles would reduce our potential adversary’s targeting challenge from over 500 “targets” to less than 12**. **Going to such a low level of targets is very destabilizing and** incentivizes a first strike against the United States**.** As the U.S. Air Force Vice Chief of Staff General Stephen Wilson has remarked, **North Korea even with its limited nuclear arsenal could under such circumstances “have the ability to destroy our nuclear intellectual capability, our nuclear production capability, and our nuclear delivery capability for about 20 years.”** In short, by removing Minuteman, we **would be unilaterally disarming the most significant part of our nuclear deterrent with little prospect of replacing that capability with other Triad element**s. Even if you could upload the remaining submarine-launched ballistic missiles with the warheads from your ICBM force, there is a serious downside. Moving ICBM warheads to new submarine missiles cannot meet the operational requirements of U.S. deterrent strategy as ICBMs have unique characteristics that SLBMs cannot duplicate. And physically, such a move is fraught with serious funding, time and technical challenges. In short, advocating a Minuteman-less deterrent and transferring all our strategic missiles to the submarine force may appear to be a clever way to hide what otherwise would be a serious negative imbalance between U.S. and Russian strategic warhead levels, but it simply undermines our deterrent capabilities, heightens instabilities, and endangers American security. Furthermore, if the Russians broke out of the 2010 New Start treaty limits, the strategic imbalance would quickly get worse. The Russians have the capability to build up their strategic nuclear forces to at least 3500 deployed warheads and possibly as high as 5000. However, in the absence of Minuteman and a modernized Triad, the only missiles the U.S. would have available to “upload” with more warheads would be our submarine based missiles. But under this scenario, the submarine missiles would already have their maximum eight-warhead loadings to meet the 1550 warhead requirement of U.S. deterrent strategy under the New Start Treaty. No more warheads could “fit” on each missile. On top of which the inventory of available warheads may not be sufficient for such a task. Mix and matching warheads from different missiles is not now fully doable even with an extensive, technologically challenging, time-consuming and costly warhead rework. Future plans do call for one of the five warhead-types we are producing to be interchangeable between the ICBM and SLBM force. However, that program is not due to be completed for some number of additional years and makes no sense if the ICBMs are eliminated or phased out. Accordingly, **there would be no hedge or surge capability to increase our nuclear forces, leaving an expanded Russian nuclear force able to intimidate and coerce the United States**. **Disarmament advocates dismiss such concerns, arguing without evidence that the American nuclear forces need not be comparable in capability or number to that of our nuclear-armed adversaries, especially Russia.** Does such an assertion make sense? Throughout the nuclear era, the U.S. has insisted that even as warheads are capped or reduced under arms control agreements, that the U.S. has every right to maintain at least parity with Russia in our level of deployed strategic nuclear systems. Previously we have never failed to achieve that throughout the nuclear era although today we deploy some 300-500 fewer strategic nuclear warheads than Russia. Creating a permanent imbalance between Russian and U.S. nuclear systems has another serious downside. **Eliminating a modernized ICBM would logically entice the Russians and Chinese to dedicate a larger majority of their research and development toward making the oceans transparent if they are not already. If they were successful in such a task, they could track, target and destroy our at-sea submarine fleet, placing our only remaining nuclear strategic missile force at risk, a point readily acknowledged even by ICBM critics**. **These combined ICBM cuts could lead to a situation where our submarines at sea, plus those in transit and in port, could through both attrition and direct attack, be destroyed, thus eliminating the ability of the** U**nited** S**tates to respond to an adversary’s nuclear strike in a timely manner**. As one former top U.S. Air Force General Officer told me, “What would be the point of making it easier for the United States to be attacked and disarmed?”

#### ICBM modernization prevents war---Russia, China, and NoKo are increasing arsenals now.

Douris 16. (Constance Douris is Vice President of the Lexington Institute. She has published articles and white papers on the smart grid, nuclear deterrence, missile defense and European security. Douris has given speeches on smart grid data privacy, cybersecurity of the electric grid and the European financial crisis. Douris has been interviewed, published or quoted by the Associated Press, New York Times, Washington Post, Boston Globe, Orange County Register, Japan Times, CBS, NBC, ABC, China Global Television Network, Defense News, Air Force Times, RealClearDefense, Business Insider, The National Interest and other media outlets. Constance’s past experience includes managing events with various stakeholders to analyze defense and energy policies. She has also worked for Representative Tim F. Murphy of Pennsylvania and Representative Randy Hultgren of Illinois where she conducted research and drafted correspondence to support strategic decision-making. The US’ nuclear deterrent is in trouble. February 18, 2016. www.businessinsider.com/the-us-nuclear-deterrent-is-in-trouble-2016-2)

While modernizing ICBMs is not cheap, it is worth noting that they are the least expensive component of the nuclear deterrent, and they provide many benefits that the other legs do not. First of all, **ICBMs are on alert status which shortens execution of a president’s decision to launch weapons in response to a nuclear surprise attack**. **De-alerting ICBMs is a bad idea**; **if the president decided to launch them, execution would be delayed since missiles would have to be prepared**. In addition, **if ICBMs were eliminated**, **an enemy would only need to strike a small number of targets to diminish the American strategic posture**. There are three bases for nuclear-capable bombers and two bases for ballistic missile submarines (SSBNs); that makes a total of five targets on the American homeland. **If an adversary were to launch a nuclear attack, some SSBNs would be safe at sea carrying up to 24 Trident missiles with multiple warheads on each and could launch an attack on an enemy or combination of enemies**. **However, bombers are not undetectable and can be destroyed with conventional forces, thus the air leg would be vulnerable and possibly compromised**. **While nuclear submarines are undetectable in the ocean today, a technological breakthrough could occur that would make the oceans less opaque** – especially with the fast pace at which technology now develops. **The sea-based leg might be severely weakened and could be at risk of being destroyed by conventional forces**. Thus, **the land leg would increase in significance as would any remaining bombers**. Finally, **eliminating ICBMs may motivate potential adversaries to try even harder to develop the capability to locate nuclear submarines underwater to put America’s second-strike capability at risk**. If those reasons are not sufficient as to why ICBMs remain relevant today, take a look at what countries are doing in other parts of the world. Moscow **plans several tests of ICBMs this year and even more in 2017 while working on a new liquid-fueled ICBM that may be able to carry 10 nuclear warheads with a combined explosive yield of about 7,500 kilotons** – roughly **500 times** that of the **Hiroshima** bomb. Beijing **tested its DF-41 road-mobile ICBM twice last year that has a range of up to 7,456 miles** – **road mobile ICBMs increase survivability because they do not have set locations for an enemy to target** – and the latest flight test used two multiple independently-targetable reentry vehicles on the DF-41. **China is developing the DF-5B, a new liquid-fueled ICBM designed to strike targets anywhere on Earth carrying four to six warheads**, expected **to be deployed in the next two years**. North Korea **revealed a modified version of its liquid-fueled KN08 ICBM** in its fall parade, **and recently launched its sixth long-range rocket test that placed a satellite into orbit** (testing rockets through satellite launches provides invaluable data for potential future ICBMs). Deterrence is effective because it causes the enemy to fear a massive retaliatory response; **ICBMs in particular ensure an adversary’s objectives are beyond reach** **because they are on alert and cannot be destroyed by conventional forces. Without ICBMs, execution of the president’s response to a nuclear first strike might be delayed and the challenge of disarming America in a surprise attack would be greatly simplified**. **A new ICBM is an** expensive but **essential investment that will prevent a potential aggressor from launching a nuclear first strike** **and ensure these fearsome weapons are never used**.

#### Extinction – nuke war fallout creates Ice Age and mass starvation

Steven Starr 15. “Nuclear War: An Unrecognized Mass Extinction Event Waiting To Happen.” Ratical. March 2015. <https://ratical.org/radiation/NuclearExtinction/StevenStarr022815.html> TG

A war fought with 21st century strategic nuclear weapons would be more than just a great catastrophe in human history. If we allow it to happen, such a war would be a mass extinction event that [ends human history](https://ratical.org/radiation/NuclearExtinction/StarrNuclearWinterOct09.pdf). There is a profound difference between extinction and “an unprecedented disaster,” or even “the end of civilization,” because even after such an immense catastrophe, human life would go on.

But extinction, by definition, is an event of utter finality, and a nuclear war that could cause human extinction should really be considered as the ultimate criminal act. It certainly would be the crime to end all crimes.

The world’s leading climatologists now tell us that nuclear war threatens our continued existence as a species. Their studies predict that a large nuclear war, especially one fought with strategic nuclear weapons, would create a post-war environment in which for many years it would be too cold and dark to even grow food. Their findings make it clear that not only humans, but most large animals and many other forms of complex life would likely vanish forever in a nuclear darkness of our own making.

The environmental consequences of nuclear war would attack the ecological support systems of life at every level. Radioactive fallout produced not only by nuclear bombs, but also by the destruction of nuclear power plants and their spent fuel pools, would poison the biosphere. Millions of tons of smoke would act to [destroy Earth’s protective ozone layer](https://www2.ucar.edu/atmosnews/just-published/3995/nuclear-war-and-ultraviolet-radiation) and block most sunlight from reaching Earth’s surface, creating Ice Age weather conditions that would last for decades.

Yet the political and military leaders who control nuclear weapons strictly avoid any direct public discussion of the consequences of nuclear war. They do so by arguing that nuclear weapons are not intended to be used, but only to deter.

Remarkably, the leaders of the Nuclear Weapon States have chosen to ignore the authoritative, long-standing scientific research done by the climatologists, research that predicts virtually any nuclear war, fought with even a fraction of the operational and deployed nuclear arsenals, will leave the Earth essentially uninhabitable.

### 1NC - Method

#### Death drive thesis outdated

Smith, Director of the Critical Transdisciplinary Research Program and Editor at Heathwood Institute and Press, ‘3/22/17

(Robert C., “An Alternative Conception of Social Pathology,” in *Society and Social Pathology*, palgrave, pg. 74-75, \*language modified)

Aside from the question of social pathology, at the heart of this book is also the issue of subject development. This involves questions of how a human being develops—or how a child changes during the course of his/ her growth (Litowitz 1999)—and how social conditions, positive or negative, affect that development. “Every psychoanalytic theory from Freud’s earliest models to the latest post-Freudian versions” attempt to capture a theory of development in some way (Litowitz 1999). Freud’s theories claim to describe universal developmental stages, which do not depend upon specific environmental responses, cultural or social or otherwise (Litowitz 1999). Thus significant emphasis is placed on biology in the development of the psyche (Moritsugu et al. 2016).

Outside of certain movements within CT and more traditional pockets of psychoanalysis, Freud’s instinct theory and biological model is generally considered highly questionable (Benja eld 2010; Benjamin 1988; Black and Mitchell 2016; Blum and Hoffman 2016; Gomez 1997; Buirski and Kottler 2007; Rogers 1951, 1959; Schneider et al. 2001; Shane et al. 1997; Simanowitz and Pearce 2003). In fact, Freud’s theories in general are being increasingly challenged, or shown as not possible to prove (Dvorsky 2013). Many have either already discarded his theories as postulation without scientic validation or have used them as guidance knowing they are awed or incredibly abstract. As Axel Honneth put it:

Only dogmatism can today still ~~blind one to~~[conceal] the fact that a string of premises of Freudian theory have [...] become highly questionable. Developments in infant research, in developmental psychology generally, but also in evolutionary biology, have cast doubt on central and basic assumptions of the psychoanalytic view of young children. (Honneth 2009, p. 126)

Even contemporary theories of the unconscious, which many have labelled one of Freud’s greatest accomplishments, are continuously seeking to establish differentiation from Freudian theory (Romand 2012), rooting their concepts in Gustav Fechner’s earlier hypotheses. Additionally, while efforts at reforming classical Freudian theory have been attempted by the likes of Jacques Lacan and his contemporary followers, which is a popular movement in psychoanalysis today, particularly or primarily in theory and through the work of Slavoj Žižek, this too can be argued for different reasons to be deeply inadequate when weighed against more up-to-date cross-disciplinary research programme (Smith 2013).

Indeed, from a wide survey of literature, and from a discussion with different clinical practitioners and psychotherapists, it is clear that Fromm’s challenging Freudian instinct theory is, in present times, a less than controversial course of critique. This lends to the belief that when reading Freud today, as Fisher and Greenberg (1996) argue, what is required is a significant amount of nuance. His theory should be evaluated, they claim, in terms of specific hypotheses rather than as a whole (Fisher and Greenberg 1996; also cited in McLeod 2013). One reason for this, quite simply, has to do with the many “unresolved contradictions in Freud’s writings”, including what has been summarized as an unevenly developed system of ideas that are not integrated into a logical, systematic whole (Boag 2014).