# Innovation DA

#### IP protections motivate innovators to take risks – that triggers tech prolif in medicine and related fields – guarantees long-term development due to continuous incentives.

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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 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

#### Pharmaceutical innovation is key to protecting against future pandemics, bioterrorism, and antibiotic resistance.

Marjanovic and Fejiao ‘20 Marjanovic, Sonja, and Carolina Feijao. Sonja Marjanovic, Ph.D., Judge Business School, University of Cambridge. Carolina Feijao, Ph.D. in biochemistry, University of Cambridge; M.Sc. in quantitive biology, Imperial College London; B.Sc. in biology, University of Lisbon. "Pharmaceutical Innovation for Infectious Disease Management: From Troubleshooting to Sustainable Models of Engagement." (2020). [Quality Control]

As key actors in the healthcare innovation landscape, pharmaceutical and life sci-ences 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 con-text**.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 compe-tition 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 pharmaceu-tical 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 sec-tor.2 It is therefore unsurprising that we are seeing indus-try-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 com-pounds to assess their utility in the fight against COVID-19; screening existing compound libraries in-house or with partners to see if they can be repurposed; accelerating tri-als 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 accel-erate 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 rela-tively few companies that are ‘commercial’ winners. Those who might gain substantial revenues will be under pres-sure 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 com-bination product that is being tested for therapeutic poten-tial 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**, **bioterror-ism** 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 imme-diate term. The pharmaceutical industry has responded to previous public health emergencies associated with infec-tious 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 contribu-tions 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 innova-tion conditions.

#### Bioterror is the largest medical threat—it outweighs natural pandemics

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Taken together, these examples show that this meme no longer serves us well. It is undoubtedly a **mistake** to underestimate the **threats from natural pathogens**. At the same time, it is equally unwise to wield this 19-year-old expression like a magic wand, intending to briskly banish concerns about people causing harm with biology. We can’t afford to blind ourselves or others to the uncomfortable truth that, with each passing day, humans grow more capable of outdoing nature and harnessing biotechnology **to cause harm on a staggering scale**, by either cruelty or carelessness. Nature has no interests, motives, or political goals. To the extent it can be said to “want” anything, it is to perpetually enhance populations’ differential reproductive success, which only rarely aligns with causing greater harm to humans. Notably, the trillions of bacteria living in the average human’s colon appear to have adapted toward a peaceful and often mutually beneficial coexistence with their host. And even deadly pathogens may theoretically evolve toward making humans less sick if doing so opens up more opportunities for transmission between hosts. The process of natural selection, for all its power, is highly constrained in its ability to generate “superbugs” possessing a diabolical suite of traits. Like human bioengineers, natural selection must work around stubborn physiological trade-offs between traits, such as genome replication rate and mutation rate. But natural selection is also handicapped by near-sightedness, driving improvements in traits that enhance a population’s fitness in its current environment with **no attention to** maintaining or improving **traits that enhance fitness in other environments**. If creating an especially deadly pathogen were like winning a soccer match against a formidable opponent, natural selection would be competing with all the cunning of **a**n especially persistent **horde of 5-year-olds**, glued to the ball and only ever capable of playing offense, defense, or goalie at any one time. By contrast, modern **biologists are gaining the ability to see the whole field**, develop an intuition about where the ball will be next, and play multiple positions simultaneously. Through a combination of rational design, directed evolution, breeding, and brute force trial and error, they can increasingly engineer organisms that excel in multiple desired functions at once, such as the ability to grow quickly in a massive industrial fermenter while churning out commercially valuable biomolecules. This growing capability promises tremendous benefits for agriculture, industry, and human health, but its potential application to the creation of pathogens **poses serious concerns**. It is worth emphasizing that trained biologists — let alone terrorists — still have difficulty one-upping natural selection’s creative output. Our understanding of biology is very much in its infancy. Yet our knowledge and capabilities are maturing rapidly, as evidenced by Twist’s prolific gene synthesis capabilities, along with recent feats in predicting protein structure, gene editing, and genome assembly. We are much closer to this exciting but frightening horizon today than we were in 2001, and this trend will likely persist. It’s also worth noting that, when it comes to weapons-grade biotechnology, states likely pose a greater risk than non-state terrorists. States have vastly more resources to support the development of biological weapons, and about **23 are known or suspected to have** maintained **biological weapons** programs in the 20th century. Some programs, like North Korea’s, likely persist to this day. As countries jockey for advantage, state biological weapons programs remain an ever-present danger, despite the treaties and export controls designed to rein them in. Covid-19, which has exposed countries’ **vulnerability to biological threats**, has done little to mitigate this danger. **Accidental releases pose** an **additional** source of **anthropogenic biorisk.** Thanks to the U.S. government’s monitoring program, we know that **dozens of agents** and toxins with the potential to pose a severe threat to public health and agriculture **are** reported **accidentally lost or released** from U.S. labs **every year**. We also know that accidental releases around the world have already caused significant harm. Such risks increase as biotechnology expands across the world and gains in strength. Biotechnology, with all its promise and peril, is moving fast. It’s irresponsible of us to shrug off current and emerging biotechnological threats by reciting “Nature is the ultimate bioterrorist” like some article of faith. As with global warming, the cost of willful ignorance and inaction is high — and increasing. Our health security requires that we engage cautiously but honestly with the full spectrum of evolving biological risks, striving toward solutions with open eyes and moral courage.

#### Bioterrorism leads to extinction – modern technologies can be used to isolate deadly pathogens and target vast populations.

Kellman ‘08 (Barry, Professor of Law, Director, International Weapons Control Center, International Human Rights Law Institute @ DePaul U., Futurist, May 2008, “Bioviolence: A Growing Threat,” http://www.britannica.com/bps/additionalcontent/18/31535413/Bioviolence-A-Growing-Threat)

According to the National Academies of Science, "The threat spectrum is broad and evolving – in some ways predictably, in other ways unexpectedly. In the future, genetic engineering and other technologies may lead to the development of pathogenic organisms with unique, unpredictable characteristics." For as far into the future as we can possibly see, every passing day it be- comes slightly easier to commit a vio lent catastrophe than it was the day before. Indeed, the rapid pace of advancing science helps explain why policies to prevent such a catastrophe are so complicated. Bioviolence Jihad? Some experts argue that terrorists and fanatics are not interested in bio- violence and that the danger might therefore be overblown. Since there have been no catastrophic bioviolence attacks, these experts argue, terrorists lack the intention to make bioweapons. Hopefully, they are correct. But an enormous amount of evidence suggests they are wrong**. From the dawn of biology's ability to isolate pathogens, people have pursued hostile applications** of biological agents. It is perilous to ignore this extensive history by presuming that today's villains are not fervent about weaponizing disease. Not a single state admits to having a bioweapons program, but U.S. intelligence officials assert that as many as **10 states** might have active programs, including North Korea, Iran, and Syria. Moreover, many **terrorist organizations have expressed interest** in acquiring biological weapons. Whatever weight the taboo against inflicting disease might have for nation-states, it is obviously irrelevant to terrorists, criminals, and lunatics. Deterrence by threat of retaliation is essentially meaningless for groups with suicidal inclinations who are likely to intermingle with innocent civilians. Al-Qaeda and affiliated Islamic fundamentalist organizations have abling them to spread in regions where there is no natural immunity. The **polio** virus **has been synthesized from scratch**; its creators called it an "animate chemical." Soon, it may be resynthesized into a form that is contagious even **among vaccinated populations**. Recreation of long-eradicated livestock diseases could **ravage herds** severely lacking in genetic diversity, **damage food supplies, and cause devastating economic losses**. Perhaps the greatest biothreat is the manipulation of the flu and other highly contagious viruses, such as Ebola. Today, scientists can change parts of a virus's genetic material so that it can perform specific functions. The genomic sequence of the Spanish flu virus that killed upwards of 40 million people nearly a century ago has been widely published; **any** savvy **scientist could reconstruct it**. The avian flu is even more lethal, albeit not readily contagious via casual aerosol delivery. A malevolent bio- scientist might augment its contagiousness. The Ebola virus might be manipulated so that it kills more slowly, allowing it to be spread farther before its debilitating effects al- together consume its carrier. A bit further off is genetic manipulation of the measles virus--one of the great killers in human history--rendering useless the immunizations that most of us receive in early childhood. Soon, laboratory resynthesis of smallpox may be possible. Advanced drug delivery systems can be used to **disseminate lethal agents to broad populations**. Bio- regulators--small organic compounds that modify body systems-- could enhance targeted delivery technologies. Some experts are concerned that new weapons could be aimed at the immune, neurological, and neuroendocrine systems. Nanotechnology that lends itself to mechanisms for advanced disease detection and drug delivery--such as gold nanotubes that can administer drugs directly into a tumor--could also de- liver weaponized agents deep into the body, substantially raising the weapon's effectiveness. Altogether, techniques that were on the frontiers of science only a dec- ade or two ago are rapidly mutating A looming danger confronts the world--the threat of bioviolence. It is a danger that will only grow in the future, yet we are increasingly failing to confront it. With every passing day, committing a biocatastrophe becomes a bit easier, and this condition will perpetuate for as long as science progresses. Biological warfare is as old as conflict, of course, but in terms of the objectives of traditional warfare-- gaining territory or resources, compelling the surrender of an opposing army--biological weapons weren't very effective. If the objective is to inflict mass death and panic on a mixed population, however, emerg- ing bioweapons offer remarkable potential. We would be irresponsible to presume that radical jihadists like al- Qaeda have ignored said potential.

#### Marginalized communities are hit hardest by a bioterror attack – current perceptions of public health institutions as unfair hinders effective response due to a lack of trust among disadvantaged populations.

According to professor of medicine David Eisenman and others in 2004, Eisenman, David P; Wold, Cheryl; Setodji, Claude; Hickey, Scot; Lee, Ben; Stein, Bradley D.; Long, Anna (2004). Accessed 9/10/21. “Will Public Health's Response to Terrorism Be Fair? Racial/Ethnic Variations in Perceived Fairness During a Bioterrorist Event. Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science”, Vol. 2, No. 3, pgs.146–156. doi:10.1089/bsp.2004.2.146.

The effectiveness of public health institutions during a bioterrorist event may be partially influenced by how they are viewed by **vulnerable populations** in the community. Historical **perceptions of unfairness** in the public health structure on the part of racial and ethnic minorities, undocumented immigrants, or other vulnerable and disenfranchised groups may be an obstacle to **effective responses**. Public health officials charged with preparing and responding to a bioterrorist event can address perceptions of unfairness by continuing to improve relationships with minority communities, including minority community representatives in bioterrorism planning, and employing proven methods for gaining community participation early in their preparedness activities and throughout the response. Addressing provisions of the current welfare and immigration laws may also be important for designing and implementing strategies to ensure an effective response to a bioterrorist attack. Improving perceptions that public health agencies will respond fairly to bioterrorism events will additionally enhance their capacity to deal with emerging natural disease outbreaks.

# Accessibility Formatting

#### 1] Interpretation: Debaters must disclose all constructive positions on open source in an accessible format on the 2021-2022 NDCA LD wiki after the round in which they read them in conjunction with a highlighted version.

#### 2] Violation: They only disclose a copy of their documents with “cut” cards where they read the parts of evidence they have highlighted.

#### Instructions are clearly given on my wiki as well as a demand for the formatting.

#### 3] Standard: Accessibility –

#### A] Digital magnification limits the amount of on screen text and requires copious amounts of horizontal and vertical scrolling making it difficult to track when not reading some text and simultaneously looking for the next highlighted section.

#### B] Screen reader users read documents audibly, but there is no way to read only the tags and highlighted parts due to their formatting.

#### C] Their formatting is inaccessible for those with ADD or ADHD and similar conditions because the parts of evidence that are not being read distract them from the parts being read.

#### 4] Paradigm issues:

#### D] Voter:

#### Inclusion is a voter – a) prior question - you have to be included to gain debates benefits b) impact multiplier – more the debaters who enter the space the more fair and educational rounds we can have.

#### Drop the debater – a) dropping the argument on formatting is incoherent because you are the norm b) it deters future abuse and sets a positive norm.

#### Use competing interps – a) reasonability allows able bodied judges to intervene to determine whether the aff was ableist or not b) reasonability is incoherent – we posted a very reasonable step by step “how to” accessibly disclose which made it predictable. You don’t get to beat back the shell by making fake defensive excuses.

#### No RVIs - a) illogical – you shouldn’t win for being fair – it’s a litmus test for engaging in substance, b) norming – I can’t concede the counterinterp if I realize I’m wrong which forces me to argue for bad norms, c) chilling effect – forces you to split your 2AR so you can’t collapse and misconstrue the 2NR, d) topic ed – prevents 1AR blipstorm scripts and allows us to get back to substance after resolving theory

# 3– T - Extra

Interpretation: Interpretation: The affirmative must garner offense only from topical links between their advocacy and the resolution (may not advocate extra-topical action in addition to the resolution)

Violation: The aff is garnering impacts from non-topical actions/actors Standards

* 1. **Predictability**

All I have to prepare with before the round is the resolution. If the aff is allowed to not have to be completely topical, it is impossible for me to predict what they will advocate when entering the round. Limiting aff advantages to the topic establishes predictability because then I will have a general idea what my opponent will run. Unpredictable arguments are unfair because I only have four minutes to think of responses while s/he has much more time to prepare his case and frontlines, placing me at a structural disadvantage. Predictable arguments foster education because we can prepare advocacies that distinctly clash, creating the best discussion and enabling us to access the educational benefits of debate.

* 1. **DA ground**

Extratopicality limits neg DA ground because they can add any nonresolutional plank to their advocacy in order to take out DA advantages and solve for uniqueness. Topical affs do not harm DA ground because then people cannot add words to the resolution, enabling the neg. to run competitive DAs. DA ground is key to fairness because they are the only way the neg can generate independent offense. It fosters education because DAs provide the best clash with aff advantages, creating discussion and therefore more educational benefits.

* 1. **Impact ground**

Extratopical positions explode the debater’s impact ground because they get access to literally every impact if they are allowed to not have to be completely topical. I solve for this because I ensure that the aff is held to the text of the resolution, so s/he can only get the impacts defined by the resolution. Explosion of impact ground is unfair because he will always be able to outweigh the NC because he can just pick the best impacts for the situation. This also harms education because the round will devolve into whoever can pick the worst harm instead of actually discussing the various nuances of an issue.

* 1. **Research Burdens**

By running extra-topicality, the aff is able to bring infinite non-topical arguments into play. This is unfair to the neg who now has to research an endless list of arguments that are non- topical. Exploding the neg burden while lessening the aff. burden destroys fairness because the ballot is not equally accessible if one side is required to do infinitely more work than the other, while keeping research burdens balanced gives both debaters an equal chance to win. Research burdens are key to education because having equal requirements to research the topic as a whole encourages detailed understanding of a topic area instead of requiring a neg’s superficially uneducational knowledge of all potential topics.

* 1. **Strategy skew**

The extra-topical advocacy forces the neg to defend the equivalent of PICS without solvency advocates because of the extra-topical advantages claimed by the aff that I can now not incorporate as part of my advocacy absent the use of a PIC. This destroys fairness because it forces me to advocate positions I was not prepared to defend and which are more difficult to defend than traditional non-topical counter plans with solvency advocates, as well as forces me to be theoretically questionable if I am to generate offense, which creates a structural disadvantage in favor of the aff.

#### Fairness and education are voters – debate’s a game that needs rules to evaluate it and education gives us portable skills for life like research and thinking.

#### Drop the debater – a) they have a 7-6 rebuttal advantage and the 2ar to make args I can’t respond to, b) it deters future abuse and sets a positive norm.

#### Use competing interps – a) reasonability invites arbitrary judge intervention since we don’t know your bs meter, b) collapses to competing interps – we justify 2 brightlines under an offense defense paradigm just like 2 interps.

#### No RVIs – a) illogical – you shouldn’t win for being fair – it’s a litmus test for engaging in substance, b) norming – I can’t concede the counterinterp if I realize I’m wrong which forces me to argue for bad norms, c) chilling effect – forces you to split your 2AR so you can’t collapse and misconstrue the 2NR, d) topic ed – prevents 1AR blipstorm scripts and allows us to get back to substance after resolving theory

# 4 – Comic Sans

#### Interp: debaters must use comic sans as their font in their speech docs.

#### Violation – the doc is in calibri

#### Prefer -

#### Inclusion – comic sans is easiest to read for people with dyslexia.

**Hudgins 17** “Hating Comic Sans Is Ableist” Lauren Hudgins Feb 23, 2017 <https://medium.com/the-establishment/hating-comic-sans-is-ableist-bc4a4de87093> OHS-AT

The irregular shapes of the letters in Comic Sans allow her to focus on the individual parts of words. While many fonts use repeated shapes to create different letters, such as a “p” rotated to made a “q,” Comic Sans uses few repeated shapes, creating distinct letters (although it does have a mirrored “b” and “d”). Comic Sans is one of a few typefaces recommended by influential organizations like the British Dyslexia Association and the Dyslexia Association of Ireland. Using Comic Sans has made it possible for Jessica to complete a rigorous program in marine zoology at Bangor University in Wales.

#### To pre-empt the 1AR - the ability to change the font doesn’t solve – it’s ableist to expect them to do something for your aesthetic preference.

**Hudgins 17** “Hating Comic Sans Is Ableist” Lauren Hudgins Feb 23, 2017 <https://medium.com/the-establishment/hating-comic-sans-is-ableist-bc4a4de87093> OHS-AT

In addition, she cannot proofread in a font that’s difficult for her to read. “You cannot fix formatting errors you cannot see!” To her, asking her to change to a font she cannot adequately use “is the epitome of ableism.” Sometimes she can ask someone in her cohort to help her spot errors, but it’s a lot to ask. “I can and have had people in my class look over my work, but you need to understand that we’re not collaborators, they’re my peers. This is an encroachment on their time.”

Asking her to change her font is asking her to take a task that is already very difficult for someone with dyslexia and demanding that she take extra steps to please the aesthetic preferences of someone for whom reading is easy.

#### Inclusion’s an independent voter – you have to be in debate to gain from it and it’s a gateway issue because it ensures everyone benefits from the activity since it’s how people get scholarships, make friends, and improve critical thinking skills