### 1

#### Interpretation – the Affirmative must present a delineated enforcement mechanism for the Plan. There is no normal means since terms are negotiated contextually among member states.

WTO No Date "Whose WTO is it anyway?" <https://www.wto.org/english/thewto_e/whatis_e/tif_e/org1_e.htm> //Elmer

**When WTO rules impose disciplines** on countries’ policies, **that is the outcome of negotiations among WTO members.** The rules are **enforced** **by** the **members themselves** **under agreed procedures that they negotiated**, **including the possibility of trade sanctions**. But those sanctions are imposed by member countries, and authorized by the membership as a whole. This is quite different from other agencies whose bureaucracies can, for example, influence a country’s policy by threatening to withhold credit.

#### Violation: they don’t

#### Standards

#### 1] Shiftiness- They can redefine the 1AC’s enforcement mechanism in the 1AR which allows them to recontextualize their enforcement mechanism to wriggle out of DA’s since all DA links are predicated on type of enforcement i.e. sanctions bad das, domestic politics das off of backlash, information research sharing da if they put monetary punishments, or trade das.

#### 2] Real World - Policy makers will always specify how the mandates of the plan should be endorsed. It also means zero solvency, absent spec, states can circumvent the Aff’s policy since there is no delineated way to enforce the affirmative which means there’s no way to actualize any of their solvency arguments.

#### ESpec isn’t regressive or arbitrary- it’s an active part of the WTO is central to any advocacy about international IP law since the only uniqueness of a reduction of IP protections is how effective its enforcement is

Ci no rvis dtd 1nc theory first fairness and education

### 2

**Pharma innovation is doing great now – answers all your warrants.**

Lisa Jarvis, 1-17-2020, (Based in Chicago, Lisa has been covering the biotech and pharmaceutical industries at C&EN since 2006. She writes feature articles that weave together the business and science of developing drugs, while also serving as pharmaceuticals editor for the magazine. She has a particular interest in rare diseases, innovative models for drug discovery, and emerging technologies.) "The new drugs of 2019," Chemical &amp; Engineering News, <https://cen.acs.org/pharmaceuticals/drug-development/new-drugs-2019/98/i3> //Jay

Although pharmaceutical companies last year were unable to top the record-shattering [59 new drugs approved in the US in 2018](https://cen.acs.org/pharmaceuticals/drug-development/new-drugs-2018/97/i3), they were still on a roll. In 2019, the Food and Drug Administration green-lighted 48 medicines, a crop that includes myriad modalities and many new treatments for long-neglected diseases. Taken together, the past 3 years of approvals represent drug companies’ most productive period in more than 2 decades. Still, some analysts caution that the steady flow of new medicines could mask troubling indications about the health of the industry. The year brought several notable trends. The first was an uptick in the number of novel mechanisms on display in the new drugs. Roughly 42% of the medicines were first in class, meaning they had new mechanisms of action; this is a jump over the prior 4 years, when that portion ranged between 32 and 36%. Another trend was the influx of newer modalities. While small molecules continue to account for the lion’s share of new molecular entities (NMEs), making up 67% of overall approvals in 2019, the list also includes several antibody-drug conjugates, an antisense oligonucleotide therapy, and a therapy based on RNA interference (RNAi). Yet another encouraging trend was the influx of innovative therapies for underserved diseases. Standout approvals include two new drugs for sickle cell anemia (Global Blood Therapeutics’ Oxbryta and Novartis’s Adakveo), an antibiotic for treatment-resistant tuberculosis (Global Alliance for TB Drug Development’s pretomanid), and a therapy for women experiencing postpartum depression (Sage Therapeutics’ Zulresso). “The quality of the drugs over the last decade or so has steadily improved since the depths of the innovation crisis 10–12 years ago,” says Bernard Munos, a senior fellow at FasterCures, a drug research think tank. “We’re seeing stuff that frankly would have looked like science fiction back then.” Those futuristic new therapies include [Novartis’s Zolgensma](https://cen.acs.org/articles/97/i22/FDA-approves-second-gene-therapy.html), a gene therapy for spinal muscular atrophy; Alnylam Pharmaceuticals’ Givlaari, the company’s second marketed RNAi-based therapy; and several critical vaccines for infectious diseases, including Ebola, smallpox, and dengue fever. Not all those edgy therapies appear in C&EN’s list. We track approvals granted through the FDA’s main drug approval arm, the Center for Drug Evaluation and Research; drugs like vaccines and gene therapies are generally reviewed through the agency’s Center for Biologics Evaluation and Research. The new-approvals list also doesn’t include several therapies that made their way to patients for the first time, even though the FDA doesn’t consider them new drugs. For example, the agency gave its green light to Johnson & Johnson’s Spravato, making it the first new treatment option for people with major depressive disorder in more than 50 years. The drug is the S enantiomer of ketamine, an N-methyl-D-aspartate receptor antagonist that had been long approved as an anesthetic, gained notoriety as a club drug, and was used for years off label to treat severe depression ([see page 18](https://cen.acs.org/biological-chemistry/neuroscience/Ketamine-revolutionizing-antidepressant-research-still/98/i3)). Also notable in 2019 was a slight dip in the number of cancer drugs, which in recent years typically made up more than a quarter of all new medicines. Last year’s 11 cancer treatments accounted for roughly 23% of approvals.

#### Biopiracy key to innovation

#### Chen, Jim. "There's no such thing as biopiracy... and it's a good thing too." McGeorge L. Rev. 37 (2006): 1.

As is true of roughly four-fifths of all known drugs, an effective pharmaceutical remedy for obesity is likely to be derived from a natural source.14 One plausible pharmacological candidate, the cactus Hoodia gordoniis, is prized for its appetite-suppressing, thirst-quenching, and awareness-heightening qualities. What the San people of South Africa have known for thousands of years about the plant they call "Xhoba" languished for three decades in the laboratories of the Council for Scientific and Industrial Research (CSIR). 6 Pfizer Corporation eventually acquired the rights to a hoodia-derived compound called P57 (so named because it was the 57th chemical tested) and at one time planned to market a diet drug that would compete against currently available concoctions that rely on the troubled combination of ephedra and caffeine. 7 A safe, effective substitute, if successfully tested and marketed, would earn massive profits. "Purchasers of diet products are often 'pathetically eager' to obtain a slenderer figure."' 8 In July 2003, however, Pfizer withdrew from the project and discontinued clinical development of P57.' 9 The failure to exploit hoodia commercially mooted the immediate question of whether P57's developers owed the San people any compensation. As the stories of neem and the rosy periwinkle illustrate, however, demands for global justice hound almost every effort to extract agricultural or pharmaceutical value from the biological bounty of the developing world.

#### **Reducing IP protections chills future investment – even the perception of wavering commitment scares off companies.**

Grabowski et al. ’15 (Harry; Professor Emeritus of Economics at Duke, and a specialist in the intersection of the pharmaceutical industry and government regulation of business; February 2015; “The Roles Of Patents And Research And Development Incentives In Biopharmaceutical Innovation”; Health Affairs; <https://www.healthaffairs.org/doi/10.1377/hlthaff.2014.1047>; Accessed: 8-31-2021; AU)

Patents and other forms of **intellectual property** **protection** play **essential roles** in encouraging innovation in biopharmaceuticals. As part of the “21st Century Cures” initiative, Congress is reviewing the policy mechanisms designed to accelerate the discovery, development, and delivery of new treatments. Debate continues about how best to balance patent and intellectual property incentives to encourage innovation, on the one hand, and generic utilization and price competition, on the other hand. We review the current framework for accomplishing these dual objectives and the important role of patents and regulatory exclusivity (together, the patent-based system), given the lengthy, costly, and risky biopharmaceutical research and development process. We summarize existing targeted incentives, such as for orphan drugs and neglected diseases, and we consider the pros and cons of proposed voluntary or mandatory alternatives to the patent-based system, such as prizes and government research and development contracting. We conclude that patents and regulatory exclusivity provisions are likely to remain the core approach to providing incentives for biopharmaceutical research and development. However, prizes and other voluntary supplements could play a useful role in addressing unmet needs and gaps in specific circumstances. Technological innovation is widely recognized as a key determinant of economic and public health progress. 1,2 Patents and other forms of intellectual property protection are generally thought to play essential roles in encouraging innovation in biopharmaceuticals. This is because the process of developing a new drug and bringing it to market is **long, costly, and risky**, and the costs of imitation are low. After a new drug has been approved and is being marketed, its **patents protect it** from competition from chemically identical entrants (or entrants infringing on other patents) for a period of time. **For firms** to have an **incentive** to **continue to invest** in innovative development efforts, they must have an **expectation** that they can **charge enough** during this period to **recoup** costs and make a profit. After a drug’s patent or patents expire, **generic rivals** can enter the market at **greatly reduced development cost** and prices, providing added consumer benefit but **eroding** the **innovator drug** company’s revenues. The Drug Price Competition and Patent Term Restoration Act of 1984 (commonly known as the Hatch-Waxman Act) was designed to balance innovation incentives and generic price competition for new drugs (generally small-molecule chemical drugs, with some large-molecule biologic exceptions) by extending the period of a drug’s marketing exclusivity while providing a regulatory framework for generic drug approval. This framework was later changed to encompass so-called biosimilars for large-molecule (biologic) drugs through the separate Biologics Price Competition and Innovation Act of 2009. Other measures have been enacted to provide research and development (R&D) incentives for antibiotics and drugs to treat orphan diseases and neglected tropical diseases. Discussion continues about whether current innovation incentives are optimal or even adequate, given evolving public health needs and scientific knowledge. For instance, the House Energy and Commerce Committee recently embarked on the “21st Century Cures” initiative, 3 following earlier recommendations by the President’s Council of Advisors on Science and Technology on responding to challenges in “propelling innovation in drug discovery, development, and evaluation.” 4 In this context, we discuss the importance of patents and other forms of intellectual property protection to biopharmaceutical innovation, given the unique economic characteristics of drug research and development. We also review the R&D incentives that complement patents in certain circumstances. Finally, we consider the pros and cons of selected voluntary (“opt-in”) or mandatory alternatives to the current patent- and regulatory exclusivity–based system (such as prizes or government-contracted drug development) and whether they could better achieve the dual goals of innovation incentives and price competition. The essential rationale for patent protection for biopharmaceuticals is that long-term benefits in the form of continued future innovation by pioneer or brand-name drug manufacturers outweigh the relatively short-term restrictions on imitative cost competition associated with market exclusivity. Regardless, the entry of other branded agents remains an important source of therapeutic competition during the patent term. Several economic characteristics make patents and intellectual property protection **particularly important** to **innovation incentives** for the biopharmaceutical industry. 5 The R&D process often takes more than a decade to complete, and according to a recent analysis by Joseph DiMasi and colleagues, per new drug approval (including failed attempts), it involves more than a **billion** dollars in out-of-pocket costs. 6 Only approximately one in eight drug candidates survive clinical testing. 6 As a result of the high risks of failure and the high costs, research and development must be funded by the **few successful, on-market products** (the top quintile of marketed products provide the dominant share of R&D returns). 7,8 Once a new drug’s patent term and any regulatory exclusivity provisions have expired, competing manufacturers are allowed to sell generic equivalents that require the investment of only several million dollars and that have a high likelihood of commercial success. **Absent intellectual property protections** that allow marketing exclusivity, innovative firms would be **unlikely** to make the costly and risky investments needed to bring a new drug to market. Patents confer the right to exclude competitors for a limited time within a given scope, as defined by patent claims. However, **they do not guarantee demand**, nor do they prevent competition from nonidentical drugs that treat the same diseases and fall outside the protection of the patents. New products may enter the same therapeutic class with common mechanisms of action but different molecular structures (for example, different statins) or with differing mechanisms of action (such as calcium channel blockers and angiotensin receptor blockers). 9 Joseph DiMasi and Laura Faden have found that the time between a first-in-class new drug and subsequent new drugs in the same therapeutic class has been dramatically reduced, from a median of 10.2 years in the 1970s to 2.5 years in the early 2000s. 10 Drugs in the same class compete through quality and price for preferred placement on drug formularies and physicians’ choices for patient treatment. Patents play an **essential role** in the economic “ecosystem” of **discovery and investment** that has developed since the 1980s. Hundreds of start-up firms, often backed by venture capital, have been launched, and a robust innovation market has emerged. 11 The value of these development-stage firms is largely determined by their proprietary technologies and the candidate drugs they have in development. As a result, the **strength of intellectual property protection** plays a **key role** in funding and partnership opportunities for such firms. Universities also play a key role in the R&D ecosystem because they conduct basic biomedical research supported by sponsored research grants from the National Institutes of Health (NIH) and the National Science Foundation (NSF). The Patent and Trademark Law Amendments Act of 1980 (commonly known as the Bayh-Dole Act) gave universities the right to retain title to patents and discoveries made through federally funded research. This change was designed to encourage technology transfer through industry licensing and the creation of start-up companies. Universities received only 390 patents for their discoveries in 1980, 12 compared to 4,296 in 2011, with biotechnology and pharmaceuticals being the top two technology areas (accounting for 36 percent of all university patent awards in 2012). 13

#### **R&D’s key to innovation – otherwise, future pandemics.**

Marjanovic et al. ’20 (Sonja; Ph.D. at the University of Cambridge; May 2020; “How to Best Enable Pharma Innovation Beyond the COVID-19 Crisis”; RAND; <https://www.rand.org/pubs/perspectives/PEA407-1.html>; Accessed: 8-31-2021; AU)

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.**

#### Evolving superbugs trigger extinction.

Srivatsa ’17 (Kadiyali; specialist in pediatric intensive and critical care medicine in the UK. Invented the bacterial identification tool ‘MAYA’; 1-12-2017; "Superbug Pandemics and How to Prevent Them", American Interest; https://www.the-american-interest.com/2017/01/12/superbug-pandemics-and-how-to-prevent-them/, Accessed: 8-31-2021; AU)

It is by now no secret that the human species is locked in a race of its own making with “superbugs.” Indeed, if popular science fiction is a measure of awareness, the theme has pervaded English-language literature from Michael Crichton’s 1969 Andromeda Strain all the way to Emily St. John Mandel’s 2014 Station Eleven and beyond. By a combination of massive inadvertence and what can only be called stupidity, we must now invent new and effective antibiotics faster than deadly bacteria evolve—and regrettably, they are rapidly doing so with our help. I do not exclude the possibility that bad actors might deliberately engineer deadly superbugs.1 But even if that does not happen, humanity faces an existential threat largely of its own making in the absence of malign intentions. As threats go, this one is entirely predictable. The concept of a “black swan,” Nassim Nicholas Taleb’s term for low-probability but high-impact events, has become widely known in recent years. Taleb did not invent the concept; he only gave it a catchy name to help mainly business executives who know little of statistics or probability. Many have embraced the “black swan” label the way children embrace holiday gifts, which are often bobbles of little value, except to them. But the threat of inadvertent pandemics is not a “black swan” because its probability is not low. If one likes catchy labels, it better fits the term “gray rhino,” which, explains Michele Wucker, is a high-probability, high-impact event that people manage to ignore anyway for a raft of social-psychological reasons.2 A pandemic is a quintessential gray rhino, for it is no longer a matter of if but of when it will challenge us—and of how prepared we are to deal with it when it happens. We have certainly been warned. The curse we have created was understood as a possibility from the very outset, when seventy years ago Sir Alexander Fleming, the discoverer of penicillin, predicted antibiotic resistance. When interviewed for a 2015 article, “The Most Predictable Disaster in the History of the Human Race,” Bill Gates pointed out that one of the costliest disasters of the 20th century, worse even than World War I, was the Spanish Flu pandemic of 1918-19. As the author of the article, Ezra Klein, put it: “No one can say we weren’t warned. And warned. And warned. A pandemic disease is the most predictable catastrophe in the history of the human race, if only because it has happened to the human race so many, many times before.”3 Even with effective new medicines, if we can devise them, we must contain outbreaks of bacterial disease fast, lest they get out of control. In other words, we have a social-organizational challenge before us as well as a strictly medical one. That means getting sufficient amounts of medicine into the right hands and in the right places, but it also means educating people and enabling them to communicate with each other to prevent any outbreak from spreading widely. Responsible governments and cooperative organizations have options in that regard, but even individuals can contribute something. To that end, as a medical doctor I have created a computer app that promises to be useful in that regard—of which more in a moment. But first let us review the situation, for while it has become well known to many people, there is a general resistance to acknowledging the severity and imminence of the danger. What Are the Problems? Bacteria are among the oldest living things on the planet. They are masters of survival and can be found everywhere. Billions of them live on and in every one of us, many of them helping our bodies to run smoothly and stay healthy. Most bacteria that are not helpful to us are at least harmless, but some are not. They invade our cells, spread quickly, and cause havoc that we refer to generically as disease. Millions of people used to die every year as a result of bacterial infections, until we developed antibiotics. These wonder drugs revolutionized medicine, but one can have too much of a good thing. Doctors have used antibiotics recklessly, prescribing them for just about everything, and in the process helped to create strains of bacteria that are resistant to the medicines we have. We even give antibiotics to cattle that are not sick and use them to fatten chickens. Companies large and small still mindlessly market antimicrobial products for hands and home, claiming that they kill bacteria and viruses. They do more harm than good because the low concentrations of antimicrobials that these products contain tend to kill friendly bacteria (not viruses at all), and so clear the way for the mass multiplication of surviving unfriendly bacteria. Perhaps even worse, hospitals have deployed antimicrobial products on an industrial scale for a long time now, the result being a sharp rise in iatrogenic bacterial illnesses. Overuse of antibiotics and commercial products containing them has helped superbugs to evolve. We now increasingly face microorganisms that cannot be killed by antibiotics, antifungals, antivirals, or any other chemical weapon we throw at them. Pandemics are the major risk we run as a result, but it is not the only one. Overuse of antibiotics by doctors, homemakers, and hospital managers could mean that, in the not-too-distant future, something as simple as a minor cut could again become life-threatening if it becomes infected. Few non-medical professionals are aware that antibiotics are the foundation on which nearly all of modern medicine rests. Cancer therapy, organ transplants, surgeries minor and major, and even childbirth all rely on antibiotics to prevent infections. If infections become untreatable we stand to lose most of the medical advances we have made over the past fifty years.

### 3

#### The member nations of the World Trade Organization, except the United States of America, will reduce intellectual property protections on medicines to the point that discoverable biological elements are not patentable outside of their country of origin

#### Biden’s infrastructure bill will pass through reconciliation but absolute Dem Unity is key.

* Turns Structural Violence

Pramuk and Franck 8-25 Jacob Pramuk and Thomas Franck 8-25-2021 "Here’s what happens next as Democrats try to pass Biden’s multitrillion-dollar economic plans" <https://www.cnbc.com/2021/08/25/what-happens-next-with-biden-infrastructure-budget-bills-in-congress.html> (Staff Reporter at CNBC)//Elmer

WASHINGTON — **House Democrats just patched up a party fracture** **to take a critical step forward with a mammoth economic agenda**. But the **path ahead could get trickier** as party leaders try to thread a legislative needle to pass more than $4 trillion in new spending. **In** the **coming weeks**, **Democrats** **aim to approve** a $1 trillion bipartisan **infrastructure** plan and up to $3.5 trillion in investments in social programs. Passing both **will require a heavy lift**, as leaders will need to **satisfy** **competing demands of centrists** wary of spending **and progressives** who want to reimagine government’s role in American households. The House is leaving Washington **until Sept. 20** after taking key steps toward pushing through the sprawling economic plans. The chamber on Tuesday approved a $3.5 trillion budget resolution and advanced the infrastructure bill, as House Speaker Nancy Pelosi, D-Calif., promised centrist Democrats to take up the bipartisan plan by Sept. 27. The Senate already passed the infrastructure legislation, so **a final House vote would send it to Biden’s desk for his** signature. Now that both chambers have passed the budget measure, **Democrats can move without Republicans** to push through their spending plan **via reconciliation**. Party leaders want committees to write their pieces of the bill by Sept. 15 before budget committees package them into one massive measure that can move through Congress. Committees could start marking up legislation in early September. Party leaders **face a challenge** in coming up with a bill that will satisfy centrists who want to trim back the $3.5 trillion price tag and progressives who consider it the minimum Congress should spend. As **one defection in the Senate** — **and four in the House** — **would sink legislation,** **Democrats have to satisfy a diverse range of views**

#### Pharma backlashes to the Plan – they’re aggressive lobbyists and will do anything to preserve patent rights.

* Turns Case – Waters down the Plan due to lobbying
* Optional Card – still thinking on if its necessary [note from Elmer]

Huetteman 19 Emmarie Huetteman 2-26-2019 “Senators Who Led Pharma-Friendly Patent Reform Also Prime Targets For Pharma Cash” <https://khn.org/news/senators-who-led-pharma-friendly-patent-reform-also-prime-targets-for-pharma-cash/> (former NYT Congressional correspondent with an MA in public affairs reporting from Northwestern University’s Medill School)//Elmer

Early last year, as lawmakers vowed to curb rising drug prices, Sen. Thom Tillis was named chairman of the Senate Judiciary Committee’s subcommittee on intellectual property rights, a committee that had not met since 2007. As the new gatekeeper for laws and oversight of the nation’s patent system, the North Carolina Republican signaled he was determined to make it easier for American businesses to benefit from it — a welcome message to the drugmakers who already leverage patents to block competitors and keep prices high. Less than three weeks after introducing a bill that would make it harder for generic drugmakers to compete with patent-holding drugmakers, Tillis opened the subcommittee’s first meeting on Feb. 26, 2019, with his own vow. “From the United States Patent and Trademark Office to the State Department’s Office of Intellectual Property Enforcement, no department or bureau is too big or too small for this subcommittee to take interest,” he said. “And we will.” In the months that followed, tens of thousands of dollars flowed from pharmaceutical companies toward his campaign, as well as to the campaigns of other subcommittee members — including some who promised to stop drugmakers from playing money-making games with the patent system, like Sen. John Cornyn (R-Texas). Tillis received more than $156,000 from political action committees tied to drug manufacturers in 2019, more than any other member of Congress, a new analysis of KHN’s Pharma Cash to Congress database shows. Sen. Chris Coons (D-Del.), the top Democrat on the subcommittee who worked side by side with Tillis, received more than $124,000 in drugmaker contributions last year, making him the No. 3 recipient in Congress. No. 2 was Sen. Mitch McConnell (R-Ky.), who took in about $139,000. As the Senate majority leader, he controls what legislation gets voted on by the Senate. Neither Tillis nor Coons sits on the Senate committees that introduced legislation last year to lower drug prices through methods like capping price increases to the rate of inflation. Of the four senators who drafted those bills, none received more than $76,000 from drug manufacturers in 2019. Tillis and Coons spent much of last year working on significant legislation that would expand the range of items eligible to be patented — a change that some experts say would make it easier for companies developing medical tests and treatments to own things that aren’t traditionally inventions, like genetic code. They have not yet officially introduced a bill. As obscure as patents might seem in an era of public **outrage** **over** drug prices, the fact that **drugmakers** gave most **to** the **lawmakers working to change the patent system** belies how important securing **the exclusive right to market a drug, and keep competitors at bay, is to their bottom line**. “**Pharma will fight to the death to preserve patent rights**,” said Robin Feldman, a professor at the UC Hastings College of the Law in San Francisco who is an expert in intellectual property rights and drug pricing. “Strong patent rights are central to the games drug companies play to extend their monopolies and keep prices high.” Campaign contributions, closely tracked by the Federal Election Commission, are among the few windows into how much money flows from the political groups of drugmakers and other companies to the lawmakers and their campaigns. Private companies generally give money to members of Congress to encourage them to listen to the companies, typically through lobbyists, whose activities are difficult to track. They may also communicate through so-called dark money groups, which are not required to report who gives them money. Over the past 10 years, the **pharmaceutical industry** has **spent** about $**233 million per year on lobbying**, according to a new study published in JAMA Internal Medicine. That is more than any other industry, including the oil and gas industry. Why Patents Matter Developing and testing a new drug, and gaining approval from the Food and Drug Administration, can take years and cost hundreds of millions of dollars. Drugmakers are generally granted a six- or seven-year exclusivity period to recoup their investments. But drugmakers have found ways to extend that period of exclusivity, sometimes accumulating hundreds of patents on the same drug and blocking competition for decades. One method is to patent many inventions beyond a drug’s active ingredient, such as patenting the injection device that administers the drug. Keeping that arrangement intact, or expanding what can be patented, is where lawmakers come in. Lawmakers Dig In Tillis’ home state of North Carolina is also home to three major research universities and, not coincidentally, multiple drugmakers’ headquarters, factories and other facilities. From his swearing-in in 2015 to the end of 2018, Tillis received about $160,000 from drugmakers based there or beyond. He almost matched that four-year total in 2019 alone, in the midst of a difficult reelection campaign to be decided this fall. He has raised nearly $10 million for his campaign, with lobbyists among his biggest contributors, according to OpenSecrets. Daniel Keylin, a spokesperson for Tillis, said Tillis and Coons, the subcommittee’s top Democrat, are working to overhaul the country’s “antiquated intellectual property laws.” Keylin said the bipartisan effort protects the development and access to affordable, lifesaving medication for patients,” adding: “No contribution has any impact on how [Tillis] votes or legislates.” Tillis signaled his openness to the drug industry early on. The day before being named chairman, he reintroduced a bill that would limit the options generic drugmakers have to challenge allegedly invalid patents, effectively helping brand-name drugmakers protect their monopolies. Former Sen. Orrin Hatch (R-Utah), whose warm relationship with the drug industry was well-known, had introduced the legislation, the Hatch-Waxman Integrity Act, just days before his retirement in 2018. At his subcommittee’s first hearing, Tillis said the members would rely on testimony from private businesses to guide them. He promised to hold hearings on patent eligibility standards and “reforms to the Patent Trial and Appeal Board.” In practice, the Hatch-Waxman Integrity Act would require generics makers challenging another drugmaker’s patent to either take their claim to the Patent Trial and Appeal Board, which acts as a sort of cheaper, faster quality check to catch bad patents, or file a lawsuit. A study released last year found that, since Congress created the Patent Trial and Appeal Board in 2011, it has narrowed or overturned about 51% of the drugmaker patents that generics makers have challenged. Feldman said the drug industry “went berserk” over the number of patents the board changed and has been eager to limit use of the board as much as possible. Patent reviewers are often stretched thin and sometimes make mistakes, said Aaron Kesselheim, a Harvard Medical School professor who is an expert in intellectual property rights and drug development. Limiting the ways to challenge patents, as Tillis’ bill would, does not strengthen the patent system, he said. “You want overlapping oversight for a system that is as important and fundamental as this system is,” he said. As promised, Tillis and Coons also spent much of the year working on so-called Section 101 reform regarding what is eligible to be patented — “a very major change” that “would overturn more than a century of Supreme Court law,” Feldman said. Sean Coit, Coons’ spokesperson, said lowering drug prices is one of the senator’s top priorities and pointed to Coon’s support for legislation the pharmaceutical industry opposes. “One of the reasons Senator Coons is leading efforts in Congress to fix our broken patent system is so that life-saving medicines can actually be developed and produced at affordable prices for every American,” Coit wrote in an email, adding that “his work on Section 101 reform has brought together advocates from across the spectrum, including academics and health experts.” In August, when much of Capitol Hill had emptied for summer recess, Tillis and Coons held closed-door meetings to preview their legislation to stakeholders, including the Pharmaceutical Research and Manufacturers of America, or PhRMA, the brand-name drug industry’s lobbying group. “We regularly engage with members of Congress in both parties to advance practical policy solutions that will lower medicine costs for patients,” said Holly Campbell, a PhRMA spokesperson. Neither proposal has received a public hearing. In the 30 days before Tillis and Coons were named leaders of the revived subcommittee, drug manufacturers gave them $21,000 from their political action committees. In the 30 days following that first hearing, Tillis and Coons received $60,000. Among their donors were PhRMA; the Biotechnology Innovation Organization, the biotech lobbying group; and five of the seven drugmakers whose executives — as Tillis laid out a pharma-friendly agenda for his new subcommittee — were getting chewed out by senators in a different hearing room over patent abuse. Cornyn Goes After Patent Abuse Richard Gonzalez, chief executive of AbbVie Inc., the company known for its top-selling drug, Humira, had spent the morning sitting stone-faced before the Senate Finance Committee as, one after another, senators excoriated him and six other executives of brand-name drug manufacturers over how they price their products. Cornyn brought up AbbVie’s more than 130 patents on Humira. Hadn’t the company blocked its competition? Cornyn asked Gonzalez, who carefully explained how AbbVie’s lawsuit against a generics competitor and subsequent licensing deal was not what he would describe as anti-competitive behavior. “I realize it may not be popular,” Gonzalez said. “But I think it is a reasonable balance.” A minute later, Cornyn turned to Sen. Chuck Grassley (R-Iowa), who, like Cornyn, was also a member of the revived intellectual property subcommittee. This is worth looking into with “our Judiciary Committee authorities as well,” Cornyn said, effectively threatening legislation on patent abuse. The next day, Mylan, one of the largest producers of generic drugs, gave Cornyn $5,000, FEC records show. The company had not donated to Cornyn in years. By midsummer, every drug company that sent an executive to that hearing had given money to Cornyn, including AbbVie. Cornyn, who faces perhaps the most difficult reelection fight of his career this fall, ranks No. 6 among members of Congress in drugmaker PAC contributions last year, KHN’s analysis shows. He received about $104,000. Cornyn has received about $708,500 from drugmakers since 2007, KHN’s database shows. According to OpenSecrets, he has raised more than $17 million for this year’s reelection campaign. Cornyn’s office declined to comment. On May 9, Cornyn and Sen. Richard Blumenthal (D-Conn.) introduced the **Affordable Prescriptions for Patients Act,** which proposed to define two tactics used by drug companies to make it easier for the Federal Trade Commission to **prosecute** them: “**product-hopping**,” when drugmakers withdraw older versions of their drugs from the market to push patients toward newer, more expensive ones, and “**patent-thicketing**,” when drugmakers amass a series of patents to drag out their exclusivity and slow rival generics makers, who must challenge those patents to enter the market once the initial exclusivity ends. **PhRMA opposed the bill.** **The next day, it gave Cornyn $1,000**. Cornyn and Blumenthal’s bill would have been “very tough on the techniques that pharmaceutical companies use to extend patent protections and to keep prices high,” Feldman said. “The **pharmaceutical industry lobbied tooth and nail against it**,” she said. “And **when the bill finally came**

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#### Democrat Senators in Big Pharma’s pocket derails the Plan.

Sirota 8-23 David Sirota 8-23-2021 "Dem Obstructionists Are Bankrolled By Pharma And Oil" <https://www.dailyposter.com/dem-obstructionists-are-bankrolled-by-pharma-and-oil/> (an American journalist, columnist at The Guardian, and editor for Jacobin. He is also a political commentator and radio host based in Denver. He is a nationally syndicated newspaper columnist, political spokesperson, and blogger)//Elmer

The **small group of conservative Democratic lawmakers** that has been **threatening to** help Republicans **halt** **Democrats’ budget package** have **raked in more than $3 million from donors in the pharmaceutical** and fossil fuel **industries** that could see reduced profits if the plan passes. As the House reconvenes today to tackle the budget reconciliation process, nine Democrats legislators have been promising to kill their party’s $3.5 trillion budget bill until Congress first passes a separate, smaller infrastructure spending measure, which has garnered some Republican support and which some environmental advocates say would exacerbate the climate crisis. Indeed, an ExxonMobil lobbyist was recently caught on tape saying the company had worked to strip climate measures out of the infrastructure bill. “**We will vote against a budget resolution** if the infrastructure package isn’t brought up first,” Democratic **Rep**. Josh **Gottheimer** **told** the Washington Post this weekend, **though** the American Prospect reported on Sunday that “**several**” of the **legislators** now **indicated they could back down**. **In the narrowly divided House**, **obstructionism from these** conservative Democrats **could decouple the infrastructure** and budget **measures**

#### Infrastructure reform solves Existential Climate Change – it results in spill-over.

USA Today 7-20 7-20-2021 "Climate change is at 'code red' status for the planet, and inaction is no longer an option" <https://www.usatoday.com/story/opinion/todaysdebate/2021/07/20/climate-change-biden-infrastructure-bill-good-start/7877118002/> //Elmer

**Not long ago**, **climate change** for many Americans **was** like **a distant bell**. News of starving polar bears or melting glaciers was tragic and disturbing, but other worldly. Not any more. **Top climate scientists** from around the world **warned of a "code red for humanity**" in a report issued Monday that says severe, human-caused global warming is become unassailable. Proof of the findings by the United Nations' Intergovernmental Panel on Climate Change is a now a factor of daily life. Due to **intense heat waves and drought**, 107 wildfires – including the largest ever in California – are now raging across the West, consuming 2.3 million acres. Earlier this summer, hundreds of people died in unprecedented triple-digit heat in Oregon, Washington and western Canada, when a "heat dome" of enormous proportions settled over the region for days. Some victims brought by stretcher into crowded hospital wards had body temperatures so high, their nervous systems had shut down. People collapsed trying to make their way to cooling shelters. Heat-trapping greenhouse gases Scientists say the event was almost **certainly made worse and more intransigent by human-caused climate change**. They attribute it to a combination of warming Arctic temperatures and a growing accumulation of heat-trapping greenhouse gases caused by the burning of fossil fuels. The **consequences of** what mankind has done to the atmo**sphere are now inescapable**. Periods of **extreme heat** are projected to **double** in the lower 48 states by 2100. **Heat deaths** are far **outpacing every other form of weather killer** in a 30-year average. A **persistent megadrought** in America's West continues to create tinder-dry conditions that augur another devastating wildfire season. And scientists say **warming oceans** are **fueling** ever **more powerful storms**,

### 4

#### The ROB is to determine the truth of falsity of the resolution –

#### 1] Textuality – five dictionaries[[1]](#footnote-1) define to negate as to deny the truth of and affirm[[2]](#footnote-2) as to prove true.

#### That OW –

#### a] Jurisdiction – judges are constrained through their constitutive purpose and proves it’s a side constraint on what arguments they can vote on.

#### b] Predictability – people base prep off the pregiven terms in the resolution.

#### 2] Isomorphism – alternative ROBs aren’t binary truth/false because of topic lit biases which increases intervention and takes the debate out of the hands of debaters.

#### 3] Inclusion – any offense functions under it as long as debaters implicate their positions to prove the truth or falsity of the resolution which maximizes substantive clash through ground and is a sequencing question for engaging in debate.

#### 4] Logic – any statement relies on a conception of truth to function – for example, I’m hungry is the same as its true that I’m hungry – logic is a litmus test for any argument and proves your ROB collapse since it relies on truth.

#### Presumption and permissibility negates – a) more often false than true since I can prove something false in infinite ways b) real world policies require positive justification before being adopted c) ought[[3]](#footnote-3) means “moral obligation” so the lack of that obligation means the aff hasn’t fulfilled their burden d) resolved[[4]](#footnote-4) indicates “firmly determined” which means they proactively did something, to negate that means that they aren’t resolved e) permissibility can’t affirm since then anything would be ok which would justify racism – we should be safe and do nothing. f) to negate[[5]](#footnote-5) means to deny the truth of which means if the aff is false you vote neg

#### Negate –

#### 1] member[[6]](#footnote-6) is “a part or organ of the body, especially a limb” but an organ can’t have obligations

#### 2] of[[7]](#footnote-7) is to “expressing an age” but the rez doesn’t delineate a length of time

#### 3] the[[8]](#footnote-8) is “denoting a disease or affliction” but the WTO isn’t a disease

#### 4] to[[9]](#footnote-9) is to “expressing motion in the direction of (a particular location)” but the rez doesn’t have a location

#### 5] reduce[[10]](#footnote-10) is to “(of a person) lose weight, typically by dieting” but IP doesn’t have a body to lose weight.

#### 6] for[[11]](#footnote-11) is “in place of” but medicines aren’t replacing IP.

#### 7] medicine[[12]](#footnote-12) is “(especially among some North American Indian peoples) a spell, charm, or fetish believed to have healing, protective, or other power” but you can’t have IP for a spell.

## Case

### Framing

#### Extinction first –

#### 1 – Forecloses future improvement – we can never improve society because our impact is irreversible

#### 2 – Turns suffering – mass death causes suffering because people can’t get access to resources and basic necessities

#### 3 – Moral obligation – allowing people to die is unethical and should be prevented because it creates ethics towards other people

#### 4 – Objectivity – body count is the most objective way to calculate impacts because comparing suffering is unethical

#### 5 – Moral uncertainty – if we’re unsure about which interpretation of the world is true – we ought to preserve the world to keep debating about it

## Adv 1

#### No tipping point

* Permian-Triassic extinction proves resiliency
* No data on tipping points
* Ecosystems never outright collapse
* 600 models prove no ecosystem collapse

Hance 18 [Jeremy Hance, wildlife blogger for the Guardian and a journalist with Mongabay focusing on forests, indigenous people, climate change and more. He is also the author of Life is Good: Conservation in an Age of Mass Extinction. Could biodiversity destruction lead to a global tipping point? Jan 16, 2018. https://www.theguardian.com/environment/radical-conservation/2018/jan/16/biodiversity-extinction-tipping-point-planetary-boundary]

Just over 250 million years ago, the planet suffered what may be described as its greatest holocaust: ninety-six percent of marine genera (plural of genus) and seventy percent of land vertebrate vanished for good. Even insects suffered a mass extinction – the only time before or since. Entire classes of animals – like trilobites – went out like a match in the wind.

But what’s arguably most fascinating about this event – known as the Permian-Triassic extinction or more poetically, the Great Dying – is the fact that anything survived at all. Life, it seems, is so ridiculously adaptable that not only did thousands of species make it through whatever killed off nearly everything (no one knows for certain though theories abound) but, somehow, after millions of years life even recovered and went on to write new tales.

Even as the Permian-Triassic extinction event shows the fragility of life, it also proves its resilience in the long-term. The lessons of such mass extinctions – five to date and arguably a sixth happening as I write – inform science today. Given that extinction levels are currently 1,000 (some even say 10,000) times the background rate, researchers have long worried about our current destruction of biodiversity – and what that may mean for our future Earth and ourselves.

In 2009, a group of researchers identified nine global boundaries for the planet that if passed could theoretically push the Earth into an uninhabitable state for our species. These global boundaries include climate change, freshwater use, ocean acidification and, yes, biodiversity loss (among others). The group has since updated the terminology surrounding biodiversity, now calling it “biosphere integrity,” but that hasn’t spared it from critique.

A paper last year in Trends in Ecology & Evolution scathingly attacked the idea of any global biodiversity boundary.

“It makes no sense that there exists a tipping point of biodiversity loss beyond which the Earth will collapse,” said co-author and ecologist, José Montoya, with Paul Sabatier Univeristy in France. “There is no rationale for this.”

Montoya wrote the paper along with Ian Donohue, an ecologist at Trinity College in Ireland and Stuart Pimm, one of the world’s leading experts on extinctions, with Duke University in the US.

Montoya, Donohue and Pimm argue that there isn’t evidence of a point at which loss of species leads to ecosystem collapse, globally or even locally. If the planet didn’t collapse after the Permian-Triassic extinction event, it won’t collapse now – though our descendants may well curse us for the damage we’ve done.

Instead, according to the researchers, every loss of species counts. But the damage is gradual and incremental, not a sudden plunge. Ecosystems, according to them, slowly degrade but never fail outright.

“Of more than 600 experiments of biodiversity effects on various functions, none showed a collapse,” Montoya said. “In general, the loss of species has a detrimental effect on ecosystem functions...We progressively lose pollination services, water quality, plant biomass, and many other important functions as we lose species. But we never observe a critical level of biodiversity over which functions collapse.”

#### Tech & adaptation solve

Child 9 [Matthew Child, Conservation Biologist. Putting ‘Ecosystem Services’ in Their Place! January 2009. <http://www.conservationtoday.org/index.php?/Editorials/Matt-Child/Putting-the-ecosystem-services-argument-in-its-place.html>]

Society can get along just fine without biodiversity.  “What?! Are you high? What’s the matter with you?!” I hear you think to yourselves reservedly.  But ponder it for a second: even if we were to live in a world in which there was no longer biodiversity but some minimum level of ‘biodeficiency’ (perhaps a few plants and a few sparrows and whatever), technology and human industriousness could plausibly allow us to exist on this Earth for posterity. The advent of scenario planning has helped elucidate this possibility by imagining landscapes covered by ‘technogardens’, complete with control towers that mimic the necessities of the seasons1. In this kind of scenario, ecosystem services are created and controlled by the human endeavour. And ecosystems would be human products, subject to the same industrialisation as the panoply of our packaged lives. Such ‘efficiencies’ of land use would theoretically allow society the luxury of setting aside the remaining land for nature reserves and parks. But would we actually do that? Having finally been convinced that nature is merely utilitarian, ironically by those conservationists whose original intention was to demonstrate the opposite, it’s doubtful whether the public would put up much resistance if the remaining land were annexed by Technogarden Inc. (Whose slogan would probably be: Why leave nature to chance?)  There is also no real precedent to believe that governments and industry leaders would stick to a ‘land sparing’ arrangement even if some people did decide that Wilderness (I capitalised to give it a mystical pronoun sort of feel) is invaluable. Take the contemporary example of developing-world agricultural systems: the question is whether to promote ‘wildlife friendly’ farming (a kind of integrated eco-agriculture) or ‘land sparing’ techniques (here: farm; there: nature). Research is beginning to show that land sparing is probably better for biodiversity (Ben Phalan, unpublished data), especially species sensitive to disturbance (which are most of the cool ones). So cordon off pieces of land, farm the living daylights out of it, and then leave the rest for wildlife. Well, yes. However, developing world citizens and their governments probably won’t see it that way. Just ‘leaving’ land alone for nature is anathema to anyone who doesn’t own an iPod.  The truth of the matter is that, no matter how we spin it or how many justifications we give for land to be left alone to produce ‘services’, optimisation will only ever lead to optimisation. It’s the eerie way in which we’re wired: the evolutionary residue of our hoarding Pleistocene past interacting with the neon-emblazoned signs and symbols of society urge us to consume ever greater amounts. Such blatant obsession with material wealth only promulgates Thoreau’s dread observation that “fruit is not ripe until turned to dollars”. Inadvertently, the value-laden ecosystem service argument for conservation will only lead to a more impoverished world. Search your feelings: you know this to be true.  By reducing nature to dollar signs destined for the cold quarantine of appraisal, we slick the conveyer belts of industrial progress. There is no way we can create a paradigm shift in the consumer conscious if we concede that ecosystems and economics exist on the same scale. The problem is twofold: firstly, if we agree that species can be valued then it can be deduced that most species are not valuable. (That’s pretty catchy, right? Maybe it’ll become a marketing campaign for Technogarden Inc.). The majority of ecosystem services are provided by a core group of species that fulfil basic functional criteria2. And there’s no real naming of names when it comes to species and ‘services’. In practical terms, this means that most species can be substituted and the ‘services’ we so cherish will still be delivered. It also means that rare and endangered species are probably not worth the ‘cost’ of protecting because they fail to effectively (and consistently) produce an anthropocentric service. “But what about keystone species?!” I hear you cry in anguish, “They’re pretty cool and can’t really be substituted!”  No, they can’t really. It’d be tricky at the very least. But I’m going to say something controversial right now, brace yourselves: the consequences of losing keystone species exists on a scale below the potential of the human endeavour to engineer solutions. Most species losses have severe ecological repercussions, this much is definitely true. But it’s probably a safe bet that, in reality, very few of these cases would translate into tangible disadvantages for humans. Don’t get me wrong, services like flood abatement, water purification, fibre production and so on are important. But their resilience and quality is mostly determined by sound land management (burning regimes, erosion control, stocking rates), and has little or nothing to do with what most people think of when they hear the word ‘biodiversity’: birds and animals. (The ‘charismatic megafauna’, to give it a buzz phrase spin). Ecosystems services are real and important but most of them can be produced and managed at the producer trophic level. Bird and animal diversity is far more important for sustaining and creating biodiversity (in terms of ensuring ecological relationships and maintaining evolutionary connections). This is an important argument if we recognise and want to convince others of our role as stewards of life. But it is dishonest and ultimately destructive to the conservation movement to try and shove the ‘biodiversity’ concept into what is already a pretty shallow economic framework.  Unless we are, of course, speaking about (drum-roll) the greatest hoax of all: “Existence Value”!

#### No impact to biod

Hance 13 [Jeremy Hance, senior writer at Mongabay citing Barry Brook, Sir Hubert Wilkins Chair of Climate Change at the School of Earth and Environmental Sciences at the University of Adelaide, and Director of Climate Science at the University of Adelaide’s Environment Institute. Warnings of Global Ecological Tipping Points May Be Overstated. 3-5-2013. http://news.mongabay.com/2013/0305-hance-tipping-points.html#r2IbUBDMyux2eU7i.99]

There's little evidence that the Earth is nearing a global ecological tipping point, according to a new Trends in Ecology and Evolution paper that is bound to be controversial. The authors argue that despite numerous warnings that the Earth is headed toward an ecological tipping point due to environmental stressors, such as habitat loss or climate change, it's unlikely this will occur anytime soon—at least not on land. The paper comes with a number of caveats, including that a global tipping point could occur in marine ecosystems due to ocean acidification from burning fossil fuels. In addition, regional tipping points, such as the Arctic ice melt or the Amazon rainforest drying out, are still of great concern.

"When others have said that a planetary critical transition is possible/likely, they've done so without any underlying model (or past/present examples, apart from catastrophic drivers like asteroid strikes)," lead author Barry Brook and Director of Climate Science at the University of Adelaide told mongabay.com. "It’s just speculation and we’ve argued [...] that this conjecture is not logically grounded. No one has found the opposite of what we suggested—they’ve just proposed it."

According to Brook and his team, a truly global tipping point must include an impact large enough to spread across the entire world, hitting various continents, in addition to causing some uniform response.

"These criteria, however, are very unlikely to be met in the real world," says Brook.

The idea of such a tipping point comes from ecological research, which has shown that some ecosystems will flip to a new state after becoming heavily degraded. But Brook and his team say that tipping points in individual ecosystems should not be conflated with impacts across the Earth as a whole.

Even climate change, which some scientists might consider the ultimate tipping point, does not fit the bill, according to the paper. Impacts from climate change, while global, will not be uniform and hence not a "tipping point" as such.

"Local and regional ecosystems vary considerably in their responses to climate change, and their regime shifts are therefore likely to vary considerably across the terrestrial biosphere," the authors write.

Barry adds that, "from a planetary perspective, this diversity in ecosystem responses creates an essentially gradual pattern of change, without any identifiable tipping points."

The paper further argues that biodiversity loss on land may not have the large-scale impacts that some ecologists argue, since invasive species could potentially take the role of vanishing ones.

"So we can lose the unique evolutionary history (bad, from an intrinsic viewpoint) but not necessarily the role they impart in terms of ecosystem stability or provision of services," explains Brook. The controversial argument goes against many scientists' view that decreased biodiversity will ultimately lessen ecological services, such as pollination, water purification, and carbon sequestration.

## Adv 2

#### Turn – IPR helps econ, Nigeria proves

NAM 8/26 [New Americans Magazine. August 26, 2021. “Intellectual Property Conference stresses impact on economy” <https://thenewamericansmag.com/2021/08/26/intellectual-property-conference-stresses-impact-on-economy/> Accessed 8/31 //gord0]

The importance of protecting intellectual property in Nigeria and its positive impact on the country’s economy dominated the contributions of participants at the annual Intellectual Property Forum held recently, with the theme “Strengthening Intellectual Property Rights Protection and Enforcement in Nigeria”. “A robust intellectual property regime will definitely impact on the economy of the country. The government stands to gain from taxes and rates from a good commercialization of these rights,” said Obafemi Agaba, President of the Intellectual Property Law Association of Nigeria. “To give rights to those who have created these works is encouraging them to continue to innovate and add value to the cultural heritage of the country and add value to the economic advancement of the country.”According to him, “the whole concept of intellectual property stems from the concept of property itself. The concept of property is that relationship between an individual and a thing such that he can exercise right over that thing.” “The law endorses an individual or a company to claim the exclusive exploitation of the produce of their intellectual exertion. It could be invention from a patent angle, it could be the creative work of knowledge or entertainment from copyright angle, it could be aesthetic appeal of a product from a design angle, and it could be trade insignias or product or services from a trademark angle”. On enforcement, Obafemi Agaba said, “the Nigerian law provides for enforcement through the law court; regulatory agencies and law enforcement agencies such as the custom and excise department, and the police.” Also contributing, Sola Arobieke, Senior Special Assistant to Ogun State Government on Industry, Trade, and Investment stressed the importance of research and development in promoting innovation. “As a nation we do not promote innovation. There is not much investment in research and development. Assistant Director and head of Small and Medium Enterprises Development Agency of Nigeria, SMEDAN in Ogun State, Bunmi Kole-Dawodu who represented the Director General/CEO of Small and Medium Enterprises Development Agency of Nigeria, SMEDAN, Dr Dikko Umaru Radda said the department is making efforts to reorientate small and medium businesses to understand the need to protect their innovations. “Most SMEs think that the most important thing is to start a business, make money and take care of the family. All other things will be taken of when the time comes.” “We have organised townhall meetings to educate them. For every creation, the right to protect the creativity should be the first step. We have told them to trademark.”The CEO of Fractional IP, Akeem Famuyiwa said “Nigeria should be able to leverage on intellectual property to grow the economy. There is a need to redesign the national intellectual property policy by focusing on areas that drive economy.” The founder and CEO of IP Radio Nigeria, Nosakhare Uwadiae Esq., Founder said “people have been running their businesses for decades without the protection of their Intellectual Property rights. The idea of IP radio is to democratize intellectual property.” “We don’t see intellectual property protection rights as only meant for the multinational. It is something that permeates all business facets. For us in Intellectual Property, it is a human right. A lot of people don’t appreciate IP. It is never discussed at board meetings. We don’t want IP to be an afterthought. It should have a seat at the table.”

#### Helps China and Russia instead, and it causes manufacturing uncertainty, and can never be an advantage in Africa – resources and skills.

Nwuke 5/19 [Kasirim Nwuke: Economist with more than 25 years of experience at the national and international levels. He works and writes on economics, science, technology and innovation, and society with special focus on the digital economy. May 19, 2020. “Africa should not support suspension of intellectual property rights protection for Covid-19” <https://www.theafricareport.com/89489/africa-should-not-support-suspension-of-intellectual-property-rights-protection-for-covid-19/> Accessed 8/25 //gord0]

In October 2020, South Africa and India, two powerhouses of generic pharmaceuticals manufacturing in the developing world, made a very broad proposal calling on members of the WTO, to suspend, for a limited time, intellectual property protection for patents, copyrights, industrial designs, and undisclosed information in relation to “the prevention, containment, or treatment of Covid-19 until widespread vaccination is in place globally, and the majority of the world’s population has developed immunity.”

The suspension proposal is driven by the fear that **developing countries will bear the brunt of the pandemic** and will be devastated by it if they do not have rapid access to affordable Covid-19 vaccines, diagnostics and treatment.

The proposal, if approved, will allow pharmaceutical manufactures in developing countries to manufacture Covid-19 products and technologies free of any fears of legal challenges for patent infringement.

This could result in greater availability of the technologies and products, better affordability worldwide, higher rates of vaccination and lower fatalities not just in the developed world but also in the developing world.

However, Big Pharma and many business groups argue that approving the proposal will have an **adverse impact on research, development and innovation.** There is also the fear that the waiver, if granted, will give China and Russia unimpeded access to advanced western pharmaceutical technologies, and consequently, **erode the West’s competitive advantage** in this area.

Most African countries support it. President Biden as candidate Biden had said on the campaign trail that he would support the suspension proposal were he elected president. The EU is divided, with **Germany firmly opposed and France now in support.** Russia has come out in support of the proposal. Vaccine nationalism in some countries, the appalling situation in India, the gradually rising headcount in many other developing counties, and low numbers of vaccinated in poor countries have gained the proposal additional supporters.

But a waiver could make things worse for Africa…

First, a waiver will introduce unnecessary uncertainty in the vaccine manufacturing process. Incumbent manufacturers (Pfizer/BioNtech, Moderna, J&J, AstraZeneca) may cut back on planned production of vaccines in response to the waiver because of uncertainty over the quantity that generic manufacturers may produce and the pricing of the new generics.

This will make it more difficult for African countries, until the generics come on the market, to procure vaccines and Covid-19 therapeutics. A waiver will be no victory for African countries as they do not have the capacities (skills, expertise, plants) to take advantage of it. Skills and capacities cannot be developed overnight. African countries should not waste precious resources asking for what they cannot use if granted.

The waiver will have the perverse effect of reinforcing Africa’s humiliating dependence on others to solve her problems. The continent has to deal with the dependency syndrome and begin to take the lead in tackling some of her challenges. The rest of the world must try to wean Africa off long-term dependency.

What African countries should do

Africa, more than any other continent, needs Big Pharma to **continue to invest in research** to develop new vaccines and cures for the many diseases that kill Africans. If Big pharma cuts back on R&D on Africa’s many diseases (and there is at the moment very little of that), many more Africans will die, not from Covid-19 but from other diseases. The situation in India and the gradually rising weekly headcount in a number of African countries is the consequence of the irresponsibility of political leaders and governments, a disease (political irresponsibility) that a waiver will not cure.

**A waiver could lead to lots of counterfeit vaccines** on the African market and given the weak food and drug regulatory capacity of African countries, this could be very dangerous not just for Africa but for the rest of the world. These counterfeit Covid-19 vaccines and treatments could present a greater public health risk to Africans than SARS-CoV-2 itself.

Bottom of Form

African countries should implement the Pharmaceuticals Manufacturing Plan for Africa; they should provide incentives for Big Pharma to set up branches in Africa; they should produce required skills by reforming their higher education sector.

In the long run, it is my view that African countries stand to lose if the South Africa-India proposal is approved by WTO members. For the reasons given above, **it is not in the self-interest of African countries to support it.** This is not the time for the usual herd “solidarity with one of our own.”

The main beneficiaries of any waiver will be China, India, and Russia, not poor African countries. Africa needs Big Pharma to remain innovative. The South Africa-India proposal will not help in this regard; it is an unnecessary distraction and should fail.

1. <http://dictionary.reference.com/browse/negate>, <http://www.merriam-webster.com/dictionary/negate>, <http://www.thefreedictionary.com/negate>, <http://www.vocabulary.com/dictionary/negate>, <http://www.oxforddictionaries.com/definition/english/negate> [↑](#footnote-ref-1)
2. *Dictionary.com – maintain as true, Merriam Webster – to say that something is true, Vocabulary.com – to affirm something is to confirm that it is true, Oxford dictionaries – accept the validity of, Thefreedictionary – assert to be true* [↑](#footnote-ref-2)
3. https://www.merriam-webster.com/dictionary/ought [↑](#footnote-ref-3)
4. https://www.google.com/search?q=resolved+definition&rlz=1C1CHBF\_enUS877US877&oq=resolved+definition&aqs=chrome..69i57.2078j0j7&sourceid=chrome&ie=UTF-8 [↑](#footnote-ref-4)
5. <http://dictionary.reference.com/browse/negate>, <http://www.merriam-webster.com/dictionary/negate>, <http://www.thefreedictionary.com/negate>, <http://www.vocabulary.com/dictionary/negate>, <http://www.oxforddictionaries.com/definition/english/negate> [↑](#footnote-ref-5)
6. https://www.google.com/search?q=member+definition&rlz=1C1CHBF\_enUS877US877&oq=member+definition&aqs=chrome.0.69i59j69i60l3.1863j0j7&sourceid=chrome&ie=UTF-8 [↑](#footnote-ref-6)
7. https://www.google.com/search?q=of+definition&rlz=1C1CHBF\_enUS877US877&oq=of+definition&aqs=chrome.0.69i59j69i61l3.1473j0j7&sourceid=chrome&ie=UTF-8 [↑](#footnote-ref-7)
8. https://www.google.com/search?q=the+definition&rlz=1C1CHBF\_enUS877US877&oq=the+definition&aqs=chrome..69i57j69i64j69i61j69i60l2.1976j0j7&sourceid=chrome&ie=UTF-8 [↑](#footnote-ref-8)
9. https://www.google.com/search?q=to+definition&rlz=1C1CHBF\_enUS877US877&oq=to+definition&aqs=chrome..69i57j69i60l3.1415j0j7&sourceid=chrome&ie=UTF-8 [↑](#footnote-ref-9)
10. https://www.google.com/search?q=reduce+definition&rlz=1C1CHBF\_enUS877US877&sxsrf=AOaemvI3lZsbmnXg5WHeL4m6rYGn8Vf6Aw%3A1630610232638&ei=OCMxYbCaJpO0tQb6wpGoCA&oq=reduce+definition&gs\_lcp=Cgdnd3Mtd2l6EAMyCQgjECcQRhD5ATIECAAQQzIECAAQQzIFCAAQgAQyBQgAEIAEMgUIABCABDIFCAAQgAQyBQgAEIAEMgUIABCABDIFCAAQgAQ6BwgAEEcQsAM6BwgAELADEEM6BwgjEOoCECc6BAgjECc6BQgAEJECOhEILhCABBCxAxCDARDHARDRAzoKCAAQsQMQgwEQQzoHCAAQsQMQQzoICAAQgAQQsQM6CAgAELEDEIMBOgoIABCABBCHAhAUSgQIQRgAUMLMBFjS3QRgnt8EaAJwAngDgAG2A4gB-heSAQozLjExLjEuMi4xmAEAoAEBsAEKyAEKwAEB&sclient=gws-wiz&ved=0ahUKEwiwlru9gOHyAhUTWs0KHXphBIUQ4dUDCA8&uact=5 [↑](#footnote-ref-10)
11. https://www.merriam-webster.com/dictionary/for#:~:text=English%20Language%20Learners%20Definition%20of,meant%20to%20be%20used%20with [↑](#footnote-ref-11)
12. https://www.google.com/search?q=medicine+definition&rlz=1C1CHBF\_enUS877US877&oq=medicine+definition&aqs=chrome.0.69i59.2986j0j7&sourceid=chrome&ie=UTF-8 [↑](#footnote-ref-12)