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#### Pharma innovation high now—monetary incentive is the biggest factor.

**Swagel 21** Phillip L. Swagel, Director of the Congressional budget office 4-xx-2021, "Research and Development in the Pharmaceutical Industry," Congressional Budget Office, <https://www.cbo.goc/publication/57126#_idTextAnchor020> SJ//DA

**Every year, the U.S. pharmaceutical industry develops a variety of new drugs that provide valuable medical benefits. Many of those drugs are expensive and contribute to rising health care costs for the private sector and the federal government. Policymakers have considered policies that would lower drug prices and reduce federal drug expenditures. Such policies would probably reduce the industry’s incentive to develop new drugs.** In this report, the Congressional Budget Office assesses trends in spending for drug research and development (R&D) and the introduction of new drugs. CBO also examines factors that determine how much drug companies spend on R&D: expected global revenues from a new drug; cost to develop a new drug; and federal policies that affect the demand for drug therapies, the supply of new drugs, or both. What Are Recent Trends in Pharmaceutical R&D and New Drug Approvals? T**he pharmaceutical industry devoted $83 billion to R&D expenditures in 2019. Those expenditures covered a variety of activities, including discovering and testing new drugs, developing incremental innovations such as product extensions, and clinical testing for safety-monitoring or marketing purposes. That amount is about 10 times what the industry spent per year in the 1980s, after adjusting for the effects of inflation.** The share of revenues that drug companies devote to R&D has also grown: **On average, pharmaceutical companies spent about one-quarter of their revenues (net of expenses and buyer rebates) on R&D expenses** in 2019, which is **almost twice as large a share of revenues as they spent in 2000.** That revenue share is larger than that for other knowledge-based industries, such as semiconductors, technology hardware, and software. The number of new drugs approved each year has also grown over the past decade. On averace, the Food and Drug Administration (FDA) approved 38 new drugs per year from 2010 through 2019 (with a peak of 59 in 2018), which is 60 percent more than the yearly average over the previous decade. **Many of the drugs that have been approved in recent years are “specialty drugs.” Specialty drugs generally treat chronic, complex, or rare conditions, and they may also require special handling or monitoring of patients**. Many specialty drugs are biologics (large-molecule drugs based on living cell lines), **which are costly to develop, hard to imitate, and frequently have high prices.** Previously, most drugs were small-molecule drugs based on chemical compounds. Even while they were under patent, those drugs had lower prices than recent specialty drugs have. Information about the kinds of drugs in current clinical trials indicates that much of the industry’s innovative activity is focused on specialty drugs that would provide new cancer therapies and treatments for nervous-system disorders, such as Alzheimer’s disease and Parkinson’s disease. **What Factors Influence Spending for R&D?** Drug companies’ R&D spending decisions depend on three main factors: Anticipated lifetime global revenues from a new drug, **Expected costs to develop a new drug**, and Policies and programs that influence the supply of and demand for prescription drugs. Various considerations inform companies’ expectations about a drug’s revenue stream, including the anticipated prices it could command in different markets around the world and the expected global sales volume at those prices (given the number of people who might use the drug). The prices and sales volumes of existing drugs provide information about consumers’ and insurance plans’ willingness to pay for drug treatments. Importantly, when drug companies set the prices of a new drug, they do so to maximize future revenues net of manufacturing and distribution costs. A drug’s sunk R&D costs—that is, the costs already incurred in developing that drug—do not influence its price. **Developing new drugs is a costly and uncertain process, and many potential drugs never make it to market. Only about 12 percent of drugs entering clinical trials are ultimately approved for introduction by the FDA. In recent studies, estimates of the average R&D cost per new drug range from less than $1 billion to more than $2 billion per drug**. Those estimates include the costs of both laboratory research and clinical trials of successful new drugs as well as expenditures on drugs that do not make it past the laboratory-development stage, that enter clinical trials but fail in those trials or are withdrawn by the drugmaker for business reasons, or that are not approved by the FDA. Those estimates also include the company’s capital costs—the value of other forgone investments—incurred during the R&D process. Such costs can make up a substantial share of the average total cost of developing a new drug. The development process often takes a decade or more, and during that time the company does not receive a financial return on its investment in developing that drug. The federal government affects R&D decisions in three ways. First, it increases demand for prescription drugs, which encourages new drug development, by fully or partially subsidizing the purchase of prescription drugs through a variety of federal programs (including Medicare and Medicaid) and by providing tax preferences for employment-based health insurance. Second, the federal government increases the supply of new drugs. It funds basic biomedical research that provides a scientific foundation for the development of new drugs by private industry. Additionally, tax credits—both those available to all types of companies and those available to drug companies for developing treatmentscof uncommon diseases—provide incentives to invest in R&D. Similarly, deductions for R&D investment can be used to reduce tax liabilities immediately rather than over the life of that investment. Finally, the patent system and certain statutory provisions that delay FDA approval of generic drugs provide pharmaceutical companies with a period of market exclusivity, when competition is legally restricted. During that time, they can maintain higher prices on a patented product than they otherwise could, which makes new drugs more profitable and thereby increases drug companies’ incentives to invest in R&D. Third, some federal policies affect the number of new drugs by influencing both demand and supply. For example, federal recommendations for specific vaccines increase the demand for those vaccines and provide an incentive for drug companies to develop new ones. Additionally, federal regulatory policies that influence returns on drug R&D can bring about increases or decreases in both the supply of and demand for new drugs. Trends in R&D Spending and New Drug Development Private spending on pharmaceutical R&D and the approval of new drugs have both increased markedly in recent years, resuming a decades-long trend that was interrupted in 2008 as generic versions of some top-selling drugs became available and as the 2007–2009 recession occurred. **In particular, spending on drug R&D increased by nearly 50 percent between 2015 and 2019.** Many of the drugs approved in recent years are high-priced specialty drugs for relatively small numbers of potential patients. By contrast, the top-selling drugs of the 1990s were lower-cost drugs with large patient populations. R&D Spending R&D spending in the pharmaceutical industry covers a variety of activities, including the following: Invention, or research and discovery of new drugs; Development, or clinical testing, preparation and submission of applications for FDA approval, and design of production processes for new drugs; Incremental innovation, including the development of new dosages and delivery mechanisms for existing drugs and the testing of those drugs for additional indications; Product differentiation, or the clinical testing of a new drug against an existing rival drug to show that the new drug is superior; and Safety monitoring, or clinical trials (conducted after a drug has reached the market) that the FDA may require to detect side effects that may not have been observed in shorter trials when the drug was in development. In real terms**, private investment in drug R&D among member firms of the Pharmaceutical Research and Manufacturers of America (PhRMA), an industry trade association, was about $83 billion in 2019, up from about $5 billion in 1980 and $38 billion in 2000**.1 Although those spending totals do not include spending by many smaller drug companies that do not belong to PhRMA, the trend is broadly representative of R&D spending by the industry as a whole.2 A survey of all U.S. pharmaceutical R&D spending (including that of smaller firms) by the National Science Foundation (NSF) reveals similar trends.3 Although total R&D spending by all drug companies has trended upward, small and large firms generally focus on different R&D activities. **Small companies not in PhRMA devote a greater share of their research to developing and testing new drugs,** many of which are ultimately sold to larger firms (see Box 1). By contrast, a greater portion of the R&D spending of larger drug companies (including those in PhRMA) is devoted to conducting clinical trials, developing incremental “line extension” improvements (such as new dosages or delivery systems, or new combinations of two or more existing drugs), and conducting postapproval testing for safety-monitoring or marketing purposes.

#### The aff crushes innovation in the pharma sector—incentivizes them to focus on non-important issues.

Glassman 21 [Amanda; 5/6/21; Executive vice president and a senior fellow at the Center for Global Development, a nonpartisan, nonprofit think tank in Washington and London; “*Big Pharma Is Not the Tobacco Industry*,” Barron, <https://www.barrons.com/articles/big-pharma-is-not-the-tobacco-industry-51620315693>] Justin

But here is the crux of the problem: The pharmaceutical industry is not the tobacco industry. They are not merchants of death. The companies are amoral and exist to make money, but their business is not fundamentally immoral. Big Pharma (mostly) develops and sells products that people need to survive and thrive. Their products improve health and welfare. Fights over access to medicines are possible because medicines exist in the first place—medicines that were usually developed by Big Pharma. And yes, the pharmaceutical industry benefits from public subsidy and publicly financed foundational research. But the companies also put their own capital at risk to develop new products, some of which offer enormous public benefits. In fact, several of them did just that in the pandemic: invested their own money to develop patented manufacturing technologies in record time. Those technologies are literally saving the world right now. Public funding supported research and development, but companies also brought their own proprietary ingenuity and private investments to bear toward solving the world’s singular, collective challenge. Their reward should be astronomical given the insane scale of the health and economic benefits these highly efficacious vaccines produce every day. Market incentives sent a clear signal that further needed innovation—greater efficacy, single doses, more-rapid manufacturing, updated formulations, fast boosters, and others—would be richly rewarded. Market incentives could also have been used to lubricate supply lines and buy vaccines on behalf of the entire world; with enough money, incredible things can happen. But activist lobbying to waive patents—a move the Biden administration endorsed yesterday—sends exactly the opposite signal. It says that the most important, valuable innovations will be penalized, not rewarded. It tells innovators, don’t bother attacking the most important global problems; instead, throw your investment dollars at the next treatment for erectile disfunction, which will surely earn you a steady return with far less agita. It is worth going back to first principles. What problem are we trying to solve? We have highly efficacious vaccines that we would like to get out to the entire world as quickly as possible to minimize, preventable disease and deaths address atrocious inequities, and enable the reopening of society, trade, and commerce. Hundreds of millions of people have been plunged into poverty over the past year; in the developing world, the pandemic is just getting started. What is the quickest way to get this done? Vaccine manufacturing is not just a recipe; if you attack and undermine the companies that have the know-how, do you really expect they’ll be eager to help you set up manufacturing elsewhere? Is the plan to march into Pfizer and force its staff to redeploy to Costa Rica to build a new factory? Do the U.S. administration or activists care that this decision could take years to negotiate at the World Trade Organization, and will likely be litigated for years thereafter? Does it make sense to eliminate the incentive for private companies to invest in vaccine R&D or in the response to the next health emergency? And if the patent waiver is only temporary and building a factory takes months or years, will anyone bother to do so, even if they could? No, none of it makes sense. Worse still, we could solve the policy problem more easily by harnessing market incentives for the global good by ponying up cash to vaccinate the entire world. No confiscation necessary.

#### Innovation checks future disease – extinction

Engelhardt 8 [H. Tristram. Innovation and the pharmaceutical industry: critical reflections on the virtues of profit. M & M Scrivener Press, 2008 (doctorate in philosophy (University of Texas at Austin), M.D. (Tulane University), professor of philosophy (Rice University), and professor emeritus at Baylor College of Medicine)] Recut Justin

Many are suspicious of, or indeed jealous of, the good fortune of others. Even when profit is gained in the market without fraud and with the consent of all buying and selling goods and services, there is a sense on the part of some that something is wrong if considerable profit is secured. There is even a sense that good fortune in the market, especially if it is very good fortune, is unfair. One might think of such rhetorically disparaging terms as "wind-fall profits". There is also a suspicion of the pursuit of profit because it is often embraced not just because of the material benefits it sought, but because of the hierarchical satisfaction of being more affluent than others. The pursuit of profit in the pharmaceutical and medical-device industries is tor many in particular morally dubious because it is acquired from those who have the bad fortune to be diseased or disabled. Although the suspicion of profit is not well-founded, this suspicion is a major moral and public-policy challenge. Profit in the market for the pharmaceutical and medical-device industries is to be celebrated. This is the case, in that if one is of the view (1) that the presence of additional resources for research and development spurs innovation in the development of pharmaceuticals and med-ical devices (i.e., if one is of the view that the allure of profit is one of the most effective ways not only to acquire resources but productively to direct human energies in their use), (2) that given the limits of altruism and of the willingness of persons to be taxed, the possibility of profits is necessary to secure such resources, (3) that the allure of profits also tends to enhance the creative use of available resources in the pursuit of phar-maceutical and medical-device innovation, and (4) if one judges it to be the case that such innovation is both necessary to maintain the human species in an ever-changing and always dangerous environment in which new microbial and other threats may at any time emerge to threaten human well-being, if not survival (i.e., that such innovation is necessary to prevent increases in morbidity and mortality risks), as well as (5) in order generally to decrease morbidity and mortality risks in the future, it then follows (6) that one should be concerned regarding any policies that decrease the amount of resources and energies available to encourage such innovation. One should indeed be of the view that the possibilities for profit, all things being equal, should be highest in the pharmaceutical and medical-device industries. Yet, there is a suspicion regarding the pursuit of profit in medicine and especially in the pharmaceutical and medical-device industries.

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#### The US is leading the biopharma race but China is close up.

Gupta 21 [Gaurav; Physician, founder of the biotechnology investment firm Ascendant BioCapital; “As Washington Ties Pharma’s Hands, China Is Leaping Ahead,” Barrons; 6/11/21; <https://www.barrons.com/articles/as-washington-ties-pharmas-hands-china-is-leaping-ahead-51623438808>] Justin

There should be no doubt that we are living at the dawn of a golden age of biomedical innovation. The American scientific engine that produced Covid-19 vaccines in record time was fueled by a convergence of advances in genomics, biomarkers, data science, and manufacturing years in the making. The first Food and Drug Administration approvals of a host of new product formats—oligonucleotide, bispecific, oncolytic virus, CAR-T, and lentivirus/AAV—all took place within the last decade. These represent an unprecedented expansion of the armamentarium that physicians have at their disposal to treat and cure disease. In the last few years, 47% of all new medicines were invented by U.S. biopharma companies, with homegrown startups driving the majority of innovation. The bulk of the remainder were developed by foreign companies specifically for the U.S. market. An indirect benefit of these trends is that most novel therapeutics undergo clinical development and early commercial launch here in the U.S. The rest of the world understands that the American patient has earlier and broader access to groundbreaking therapies via these mechanisms. Indeed, the past decade is filled with examples of medical “firsts” for American patients: the first cure for Hepatitis C, the first gene therapy for blindness, the first immunotherapy for cancer. Future rewards will be greater still if we preserve our current system of incentivizing and protecting innovation. The remarkable innovation capacity of our biopharmaceutical industry ought to be a source of national pride. Yet while “Made in America” is the global standard for medicines in development today, misguided policy risks ceding our scientific prowess to other countries in the future. This is particularly true in the case of China, where biotechnology has become a strategic pillar for the health of its people and economy. From 2016 to 2020, the market capitalization of all Chinese biopharma companies increased exponentially from $1 billion to over $200 billion. China saw over $28 billion invested in its life sciences sector in 2020, double the previous year’s amount. Returns on China’s investment are already arriving. The FDA approved a drug developed in China for the first time ever in 2019. While China’s innovation capacity currently remains behind America’s, my experiences as a biopharma professional make it clear they are doing everything they can to catch up and catch up fast. In fact, when I speak to Chinese biotechnology executives, they boast that they can run clinical trials faster than their U.S. counterparts. The danger of misguided policies that disincentivize pharmaceutical innovation in the U.S. is effectively driving that same innovation to China. If we close off the market in the U.S. at the same time that China is opening its market to innovative new products, then we will see companies choose to first launch impactful novel medicines in China, based on clinical trials conducted in China. Because the FDA rarely accepts data generated entirely outside the U.S., this relocation of research capacity will negatively affect Americans’ access to cutting-edge therapies.

#### The plan gives away sensitive biotechnology information that facilitates a China lead.

Rogin 21 [Josh; Columnist for the Global Opinions section of the Washington Post and a political analyst with CNN. Previously, he has covered foreign policy and national security for Bloomberg View, Newsweek, the Daily Beast, Foreign Policy magazine, Congressional Quarterly, Federal Computer Week magazine and Japan’s Asahi Shimbun newspaper. He was a 2011 finalist for the Livingston Award for Young Journalists and the 2011 recipient of the Interaction Award for Excellence in International Reporting. Rogin holds a BA in international affairs from George Washington University and studied at Sophia University in Tokyo. He lives in Washington, DC; “Opinion: The wrong way to fight vaccine nationalism,” The Washington Post; 4/8/21; <https://www.washingtonpost.com/opinions/global-opinions/the-wrong-way-to-fight-vaccine-nationalism/2021/04/08/9a65e15e-98a8-11eb-962b-78c1d8228819_story.html>] Justin

Americans will not be safe from covid-19 until the entire world is safe. That basic truth shows why vaccine nationalism is not only immoral but also counterproductive. But the simplest solutions are rarely the correct ones, and some countries are using the issue to advance their own strategic interests. The Biden administration must reject the effort by some nations to turn our shared crisis into their opportunity. As the inequities of vaccine distribution worldwide grow, a group of more than 50 developing countries led by India and South Africa is pushing the World Trade Organization to dissolve all international intellectual property protections for pandemic-related products, which would include vaccine research patents, manufacturing designs and technological know-how. The Trump administration rejected the proposal to waive the agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) for the pandemic when it was introduced in October. Now, hundreds of nongovernmental organizations and dozens of Democratic lawmakers are pushing the Biden administration to support the proposal. But many warn the move would result in the United States handing over a generation of advanced research — much of it funded by the U.S. taxpayer — to our country’s greatest competitors, above all China. In Congress, there’s justified frustration with the United States’ failure to respond to China’s robust vaccine diplomacy, in which Beijing has conditioned vaccine offers to pandemic-stricken countries on their ignoring security concerns over Chinese telecom companies or abandoning diplomatic recognition of Taiwan. There’s also a lot of anger at Big Pharma among progressives for profiting from the pandemic. “We are in a race against time, and unfortunately Big Pharma is standing in the way of speedily addressing this problem,” Rep. Jan Schakowsky (D-Ill.), who supports the effort to waive intellectual property protections, told me in an interview. “I think the real security issue is that while the United States balks in making sure that we help ourselves, that these adversaries will just jump right in.” Schakowsky argued that alternative measures for helping poor countries manufacture vaccines are simply not moving fast enough to save lives and that the United States has a duty to respond. House Speaker Nancy Pelosi (D-Calif.) personally conveyed her support for the waiver to President Biden, Schakowsky said. But Big Pharma is just one piece of the puzzle. Countries such as India and South Africa have been trying to weaken WTO intellectual property protections for decades. The mRNA technology that underpins the Pfizer and Moderna vaccines was funded initially by the Defense Advanced Research Projects Agency and has national security implications. Inside the Biden administration, the National Security Council has already convened several meetings on the issue. The waiver is supported by many global health officials in the White House and at the U.S. Agency for International Development, who believe the United States’ international reputation is suffering from its perceived “America First” vaccine strategy. On Wednesday, U.S. Trade Representative Katherine Tai spoke with WTO Director General Ngozi Okonjo-Iweala about the waiver issue. USTR is convening its own interagency meetings on the issue, which many see as a move to reassert its jurisdiction over WTO matters. If and when this does get to Biden’s desk, he will also hear from national security officials who believe that waiving TRIPS would result in the forced transfer of national security-sensitive technology to China, a country that strives to dominate the biotechnology field as part of its Made in China 2025 strategy. Once countries such as China have this technology, they will apply their mercantilist industrial models to ensure their companies dominate these strategically important industries, potentially erasing thousands of U.S. jobs. “We would be delivering a competitive advantage to countries that are increasingly viewed as our adversaries, at taxpayer expense, when there are other ways of doing this,” said Mark Cohen, senior fellow at the University of California at Berkeley Law School.

#### That’s weaponized – destroys primacy.

Kuo 17 [Mercy A; Executive Vice President at Pamir Consulting; “The Great US-China Biotechnology and Artificial Intelligence Race,” The Diplomat; 8/23/17; <https://thediplomat.com/2017/08/the-great-us-china-biotechnology-and-artificial-intelligence-race/>] TDI // Re-Cut Justin

Trans-Pacific View author Mercy Kuo regularly engages subject-matter experts, policy practitioners, and strategic thinkers across the globe for their diverse insights into the U.S. Asia policy. This conversation with Eleonore Pauwels – Director of Biology Collectives and Senior Program Associate, Science and Technology Innovation Program at the Wilson Center in Washington D.C. – is the 104th in “The Trans-Pacific View Insight Series.” Explain the motivation behind Chinese investment in U.S. genomics and artificial intelligence (AI). With large public and private investments inland and in the U.S., China plans to become the next AI-Genomics powerhouse, which indicates that these technologies will soon converge in China. China’s ambition is to lead the global market for precision medicine, **which necessitates acquiring strategic tech**nological and human capital in both genomics and AI. And the country excels at this game. A sharp blow in this U.S.-China competition happened in 2013 when BGI purchased Complete Genomics, in California, with the intent to build its own advanced genomic sequencing machines, therefore securing a technological knowhow mainly mastered by U.S. producers. There are significant economic incentives behind China’s heavy investment in the increasing convergence of AI and genomics. This golden combination will drive precision medicine to new heights by developing a more sophisticated understanding of how our genomes function, leading to precise, even personalized, cancer therapeutics and preventive diagnostics, such as liquid biopsies. By one estimate, the liquid biopsy market is expected to be worth $40 billion in 2017. Assess the implications of iCarbonX of Shenzhen’s decision to invest US$100 million in U.S.-company PatientsLikeMe relative to AI and genomic data collection. iCarbonX is a pioneer in AI software that learns to recognize useful relationships between large amounts of individuals’ biological, medical, behavioral and psychological data. Such a data-ecosystem will deliver insights into how an individual’s genome is mutating over time, and therefore critical information about this individual’s susceptibilities to rare, chronic and mental illnesses. In 2017, iCarbonX invested $100 million in PatientsLikeMe, getting a hold over data from the biggest online network of patients with rare and chronic diseases. If successful, this effort could turn into genetic gold, making iCarbonX one of the wealthiest healthcare companies in China and beyond. The risk factor is that iCarbonX is handling more than personal data, but potentially vulnerable data as the company uses a smartphone application, Meum, for customers to consult for health advice. Remember that the Chinese nascent genomics and AI industry relies on cloud computing for genomics data-storage and exchange, creating, in its wake, new vulnerabilities associated with any internet-based technology. This phenomenon has severe implications. How much consideration has been given to privacy and the evolving notion of personal data in this AI-powered health economy? And is our cyberinfrastructure ready to protect such trove of personal health data from hackers and industrial espionage? In this new race, will China and the U.S. have to constantly accelerate their rate of cyber and bio-innovation to be more resilient? Refining our models of genomics data protection will become a critical biosecurity issue. Why is Chinese access to U.S. genomic data a national security concern? **Genomics** and computing research **is inherently dual-use, therefore a strategic advantage in a nation’s security arsenal.** Using AI systems to understand how the functioning of our genomes impacts our health **is of strategic importance for biodefense.** This knowledge will lead to increasing developments at the forefront of medical countermeasures, **including vaccines**, antibiotics, and targeted treatments relying on virus-engineering and microbiome research. Applying deep learning to genomics data-sets could help geneticists learn how to use genome-editing (CRISPR) to efficiently engineer living systems, but also to treat and, even “optimize,” human health, **with potential applications in military enhancements**. A $15 million partnership between a U.S. company, Gingko Bioworks, and DARPA aims to genetically design new probiotics as a protection for soldiers against a variety of stomach bugs and illnesses. China could be using the same deep learning techniques on U.S. genomics data to better comprehend how to develop, patent and manufacture tailored cancer immunotherapies in high demand in the United States. Yet, what if Chinese efforts venture into understanding how to impact key genomics health determinants relevant to the U.S. population? **Gaining access to increasingly large U.S. genomic data-sets gives China a knowledge advantage into leading the next steps in bio-military research.** Could biomedical data be used to develop bioweapons? Explain. Personalized medicine advances mean that personalized bio-attacks are increasingly possible. The combination of AI with biomedical data and genome-editing technologies will help us predict genes most important to particular functions. Such insights will contribute to knowing how a particular disease occurs, how a newly-discovered virus has high transmissibility, but also why certain populations and individuals are more susceptible to it. Combining host susceptibility information with pathogenic targeted design, **malicious actors could engineer pathogens that are tailored to overcome the immune system or the microbiome of specific populations.**

#### That causes extinction.

Yulis 17 [Max; Major in PoliSci, Penn Political Review; “In Defense of Liberal Internationalism,” Penn Political Review; 4/8/17; <http://pennpoliticalreview.org/2017/04/in-defense-of-liberal-internationalism/>] // Re-Cut Justin

Over the past decade, international headlines have been bombarded with stories about the unraveling of the post-Cold War world order, the creation of revolutionary smart devices and military technologies, the rise of militant jihadist organizations, and nuclear proliferation. Indeed, times are paradoxically promising and alarming. In relation to treating the world’s ills, fortunately, there is a capable hegemon– one that has the ability to revive the world order and traditionally hallmarked human rights, peace, and democracy. The United States, with all of its shortcomings, had crafted an international agenda that significantly impacted the post-WWII landscape. Countries invested their ambitions into security communities, international institutions, and international law in an effort to mitigate the chances of a nuclear catastrophe or another World War. The horrors and atrocities of the two Great Wars had traumatized the global community, which spurred calls for peace and the creation of a universalist agenda. Today, the world’s fickle and declining hegemon still has the ability, but not the will, to uphold the world order that it had so carefully and eagerly helped construct. Now, the stakes are too high, and there must be a mighty and willing global leader to lead the effort of diffusing democratic ideals and reinforcing stability through both military and diplomatic means. To do this, the United States must abandon its insurgent wave of isolationism and protectionism, and come to grips with the newly transnational nature of problems ranging from climate change to international terrorism.

First, the increase in intra-state conflict should warrant concern as many countries, namely in Africa and the Middle East, are seeing the total collapse of civil society and government. These power vacuums are being filled with increasingly ideological and dangerous tribal and non-state actors, such as Boko Haram, ISIS, and Al-Shabaab. Other bloody civil wars in Rwanda, Sudan, and the Congo have contributed to the deaths of millions in the past two decades. As the West has seen, however, military intervention has not been all that successful in building and empowering democratic institutions in the Far East. A civil crusade, along with the strengthening of international institutions, may in fact be the answer to undoing tribal, religious, and sectarian divisions, thereby mitigating the prospects of civil conflict. During the Wilsonian era, missionaries did their part to internationalize the concept of higher education, which has contributed to the growth of universities in formerly underdeveloped countries such as China and South Korea.[1] In addition, the teachings of missionaries emphasized the universality of humanity and the oneness of man, which was antithetical to the justifications for imperialism and the rampant sectarianism that plagued much of the Middle East and Africa.[2] Seeing that an increase in the magnitude of human casualty is becoming more of a reality due to advancements in military technology and the increasing outbreaks of civil war, international cooperation and the diffusion of norms that highlight the importance of stable governance, democracy, and human rights is the only recourse to address the rise in sectarian divides and civil conflicts. So long as the trend of the West’s desire to look inward continues, it is likely that nation states mired in conflict will devolve into ethnic or tribal enclaves bent on relying on war to maintain their legitimacy and power. Aside from growing sectarianism and the increasing prevalence of failed states, an even more daunting threat come from weapons that transcend the costs of conventional warfare.

The problem of nuclear proliferation has been around for decades, and on the eve of President Trump’s inauguration, it appeared that Obama’s lofty goal of advocating for nonproliferation would no longer be a priority of American foreign policy.[3] In addition, now that the American president is threatening to undo much of the United States’ extensive network of alliances, formerly non-nuclear states may be forced to rearm themselves. Disarmament is central to liberal internationalism, as was apparent by the Washington Naval Treaty advocated by Wilson, and by the modern CTBT treaty. The reverse is, however, being seen in the modern era, with cries coming from Japan and South Korea to remobilize and begin their own nuclear weapon programs.[4] A world with more nuclear actors is a formula for chaos, especially if nuclear weapons become mass-produced. Non-state actors will increasingly eye these nuclear sites as was the case near a Belgian nuclear power plant just over a year ago.[5] If any government commits a serious misstep, access to nuclear weapons on the behalf of terrorist and insurgent groups will become a reality, especially if a civil war occurs. States with nuclear weapons require domestic stability and strong security, which is why states such as Israel, North Korea, and Pakistan could be in serious trouble in the event of a domestic uprising or military coup. The disarmament of all states is essential for human survival, and if it is not achieved, then a world full of nuclear weapons and an international system guided by realpolitik could give rise to nuclear warfare. In today’s world, nuclear weapons leave all states virtually defenseless. But, for nuclear deproliferation to become a cornerstone of the global agenda, a pacifying and democratic power must rise to the limelight to advocate the virtues of peace, stability, and human rights.

## 3

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#### WTO consensus on fishing subsidies likely now but requires negotiations- consensus is key to solving overfishing- the brink is now.

Koop 21 [Fermin; Argentine journalist specializing in the environment with experience across diverse publications; “WTO Inches Towards a Deal to End Harmful Fishing Subsidies,” Maritime-Executive; 7/30/21; <https://www.maritime-executive.com/editorials/wto-inches-towards-a-deal-to-end-harmful-fishing-subsidies>] Justin

After more than 20 years of negotiations, the World Trade Organization (WTO) has moved a step closer to an agreement on ending harmful fishing subsidies. The deal would set new rules for the global fishing industry and limit government funding that contributes to unsustainable fishing and the depletion of global fish stocks. In a meeting with government ministers and heads of national delegations, WTO members vowed to finish the negotiations before the WTO’s Twelfth Ministerial Conference (MC12) in late November, and to empower their delegations in Geneva to do so. Members also said the negotiating text currently on the table can be used as the basis to strike a final agreement. “It’s been a successful day,” WTO chief Ngozi Okonjo-Iweala told reporters at the close of the meeting. “In 20 years of negotiations, this is the closest we have ever come towards reaching an outcome – a high-quality outcome that would contribute to building a sustainable blue economy. I feel new hope.” The talks’ chair, Santiago Wills, was also upbeat: “I believe that the answers today have given us the ingredients to reach a successful conclusion. Members now want to move to text-based negotiations. Twenty years has been long enough. If we continue [negotiating] for another 20 years, there won’t be any fish left.” Negotiators at the WTO had been tasked with eliminating subsidies for illegal, unreported and unregulated (IUU) fishing and prohibiting certain subsidies that contribute to overcapacity and overfishing. Talks have been going on since 2001 but differences between governments have hindered progress. 2020 had been set as a deadline to strike an agreement, but talks were delayed due to Covid-19 restrictions and the US presidential elections. A deadline was then set for this July, which was again missed. Now, Okonjo-Iweala, appointed as head of the WTO in March, aims to reach an agreement by year-end in what will be a key test for the organization’s credibility, with members deadlocked on other fronts. “In international negotiations of this type only two things are relevant. The nitty-gritty to make sure everybody is on the same page, and the spirit that prevails. If Ngozi and Wills reflected correctly what happened in the meeting, we can say there’s cautious optimism over an agreement,” Remi Parmentier, director of environmental consultancy The Varda Group, told China Dialogue Ocean. A potential agreement At the meeting, ministers discussed an eight-page draft agreement, which lists a range of subsidy bans and some conditions for exemptions for poorer countries, all of which are yet to be finalised. While some delegations like the EU were positive, several ministers expressed reservations over the content of the text. “Clearly, it will lead to capacity constraints for developing countries, while advanced nations will continue to grant subsidies,” Indian trade minister Piyush Goyal said at the meeting, regarding one part of the text. Pakistan described the draft as “regressive and unbalanced,” while the African coalition said “significant gaps” remain. Countries’ differences were acknowledged by Ngozi and Wills at the meeting. Nevertheless, they remain optimistic and said the issues would be resolved once countries move into text-based negotiations. The agreement on fishing subsidies will require a consensus among all member states, according to WTO rules. The draft deal essentially proposes three categories of prohibited subsidies; those that support IUU fishing, affect overfished stocks, or lead to overcapacity and overfishing. While this may sound simple, the political, economic and cultural complexities represent real challenges. One of the main issues has been the demand for developing countries and the poorest nations to receive so-called special and differential treatment. While this is widely accepted for the poorest countries, demands from self-identified developing countries to be exempt from subsidy constraints has proven to be difficult to accept. Many of the major fishing nations are considered developing countries by the WTO, including China, which has one of the world’s biggest fishing fleets. China’s minister of commerce, Wang Wentao, expressed China’s “support for the conclusion of [fishing subsidies] negotiations before the end of MC12.” Speaking at the meeting on 15 July, Wang stressed that concluding the negotiations would represent a major contribution from the WTO to the United Nations’ 2030 Sustainable Development Goals. “As a developing country and a major fishing power, China will take on obligations commensurate with our level of development," he said. At the meeting, Wang also introduced China’s emphasis on green development in future policies on fishing subsidies and its “zero-tolerance” policy towards IUU. Isabel Jarrett, manager of The Pew Charitable Trusts’ project to end harmful fisheries subsidies, told China Dialogue Ocean that an agreement “with too many loopholes” would undermine the WTO’s sustainability goals. The final text has to ensure that governments aren’t allowed to subsidize “irresponsible practices that can hurt fish populations,” she added. The scale of the problem Subsidies paid to the global fishing industry amount to around $35 billion per year (228 billion yuan). Of this, $20 billion is given in forms that enhance the capacity of large fishing fleets, such as fuel subsidies and tax exemption programmes, according to the European Parliament’s Committee on Fisheries. In 2018, the world’s top 10 providers of harmful fisheries subsidies gave out $15.4 billion in total, according to a report by Oceana. The EU, as a bloc, provided $2 billion, ranking third behind China and Japan. Research by Pew has found that eliminating all harmful subsidies could help fish populations recover. Specifically, it would result in an increase of 12.5 percent in global fish biomass by 2050, which translates into nearly 35 million metric tonnes of fish – almost three times Africa’s entire fish consumption in a single year. The need for progress on an agreement has gained new urgency during the last few years, as the world’s fish populations have continued to fall below sustainable levels. Around 60 percent of assessed stocks are fully exploited and 30 percent are overexploited, according to the latest figures from the UN Food and Agriculture Organization. The termination of harmful subsidies, which is embedded in the UN Sustainable Development Goals (SDGs), would be seen as key progress on ocean sustainability ahead of this year’s UN biodiversity conference in Kunming, scheduled for October, and the COP26 climate summit in Glasgow in November. “This is the year that the agreement has to be delivered. The WTO chief has made positive pronouncements of an agreement this year. There’s light at the end of this 20-year tunnel. The alternative of being in the tunnel shadows is a depressing prospect at the time ocean life is declining,” Peter Thomson,?UN special envoy for the ocean, said in a recent webinar.

#### Negotiations on IPR require tradeoffs- empirics.

DC = DEVELOPING COUNTRY

NET = NET EXPORTER OF TECH (advanced countries)

TNC = Trade Negotiations Committee

Anell = Lars Anell the Chair of the TRIPS negotiations

Marcellin 16 Marcellin, Sherry (Professor, London School of Economics). The political economy of pharmaceutical patents: US sectional interests and the African Group at the WTO. Routledge, 2016. SJMS

Regarding the provisions in the section on patents, including that on exclusions from patentability, another DC negotiator maintained that the stipulations should reflect ‘a well-balanced system’ (ibid: 3). Ironically however, he proceeded to categorise the texts as ‘reasonably satisfactory’, contending that a positive attitude of his delegation towards them would depend to a large extent on progress in other areas of the negotiation (ibid). This was the second time in the negotiations that a DC delegate made such an obvious attempt to concede in TRIPS while seeking bargains in other negotiating areas, suggesting that the real access-to-medicines implications of patents were not fully appreciated by all such participants (Abbott 2002: 43–4); and that such participants may have understood that the negotiations would not have culminated in their favour. Immediately after the April TNC of 1989 a similarly affiliated participant had also affirmed that if some participants were to be required to make sacrifices in the area of IPRs, there should be a readiness to make such sacrifices for their benefit in agriculture, natural resources or other negotiating groups (MTN.GNG/NG11/13: 5).10 This first declaration could be construed as a signal of a prejudged outcome that disfavoured DCs. Towards the end of this session another DC participant, supported by several others, pointed out that some other delegations had very high ambitions in the area of TRIPS and that the time had come to review the subject matter in the context of the Uruguay Round negotiations as a whole, particularly in relation to what was being offered in the more traditional areas of the GATT (ibid: 12). At these final stages in the negotiations, DCs were actively seeking trade-offs in other areas in return for agreeing to IPRs in the manner in which the NETs had anticipated (Adede 2003: 30 and Matthews 2002: 109). Anell’s informal consultations and his proposed bilateral bargaining strategies worked in tandem to consolidate the weakening position of DCs propagated during the April TNC meeting in 1989. Anell ended this final session by sharing concerns expressed about the need for results in all areas of the UR, explicitly urging delegations to manufacture consensus through concessionary bargaining. The effects would later be seen in Dunkel’s ‘Draft Final Acts Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations’.11

#### That collapses biodiversity.

Osmanski 20 [Stephanie; Freelance Journaler, Writer at GreenMatters; “How Does Overfishing Affect Biodiversity? Let's Do a Deep Dive,” GreenMatters; 12/29/20; <https://www.greenmatters.com/p/how-overfishing-affects-biodiversity>] Justin

Three out of seven people — about 260 million worldwide — rely on seafood as their primary source of protein, which means the environmental and health impacts of fishing are more relevant than ever. In fact, overfishing is becoming a huge problem; Conservation.org reports that one-third of the world’s wild-caught fisheries are depleted as a direct result of overfishing, pollution, and climate change. As fish populations decline, farmed fisheries have started supplying most of our seafood, which is often plagued with additives, growth hormones, genetically modified organisms, and even food dye. However, overfishing results in other issues, too — mainly, environmental issues. Overfishing significantly affects biodiversity, which in turn, changes the ecosystem. Keep reading to find out more on how overfishing contributes to biodiversity. What is overfishing? Overfishing refers to non-sustainable practices of fishing that result in the depletion of fish species. In layman’s terms, overfishing happens when fishermen catch fish faster than the fish can reproduce. Long ago, when fishing relied on more natural methods (instinct, word-of-mouth, and guesswork), fishing practices were more natural and therefore, sustainable. But due to modern technology, fishermen now get significant help from high-tech machinery that can detect and track schools of fish, enable fishermen to explore new areas of water they had not been able to access before, and also embark in deeper waters. According to the United Nations Food and Agricultural Organization (FAO), over 70 percent of the world’s fisheries are “fully exploited,” “over exploited,” or “significantly depleted” as a direct result of overfishing. What is biodiversity? Biodiversity refers to the variety of life on Earth, referring to our planet’s vast number of biological species and organisms. It's heavily impacted when certain species cease to exist, or become threatened at a rate that is faster than that species can reproduce. Ultimately, the number of plants, animals, and microorganism species on Earth determines biodiversity. According to Global Issues, varying genes in each of these species also contributes to more biodiversity. If ecosystems or species become threatened or cease to exist, biodiversity decreases — and ultimately, all walks of life are impacted — because of the degrading food chain and other necessary biological processes. How does overfishing affect biodiversity? Overfishing impacts biodiversity in more ways than one — per Marine Science Today, overfishing alters the food chain. If a certain species is wiped out due to overfishing, the animals that rely on that species as a food source could starve, or might resort to eating other species of fish, thus altering the ecosystem and food chain as a whole. On the other end of the spectrum, the population generally consumed by the extinct species would grow disproportionately, often making way for an influx of pests. Overfishing creates a domino effect that impacts all living organisms, therefore significantly affecting biodiversity. Why is biodiversity important? Biodiversity is necessary, because every organism plays a role in the eco-system. If one species is compromised, biodiversity becomes compromised as a whole: the food chain, ecosystems, and more. The more biodiversity there is on this planet, the more productive ecosystems are, contributing to a greater availability of biological resources. Apart from food, biodiversity impacts medicinal resources, wood products, and ornamental plants. Biodiversity also helps ecosystems recover in cases of disaster. If a weather event threatens natural disasters, healthy, biodiverse ecosystems have a better chance of bouncing back. It also ensures protection of water resources, soil formation, nutrient storage and recycling, and the necessary breakdown of pollution. Why is marine biodiversity is important to humans? Aside from assuring food security, marine biodiversity also provides social and socioeconomic benefits. Socioeconomically, many areas of the world rely on fisheries to survive. If fishermen cannot sell seafood, fisheries cannot purchase fish, and these ways of life are forced out of business. A side effect of that would be that so many populations that rely on fisheries would be out of their main source of protein. Biodiversity also brings many social benefits to human populations: the opportunities to research and educate about fisheries, natural habitats, ecosystems, and various species. It also increases tourism and recreational activities, while having a lasting cultural impact, too — if specific populations rely on a species for food, loss of that population would affect that population’s culture and food supply. Marine biodiversity is incredibly important — let's take a stand against overfishing to ensure it doesn't plague eco-systems and human populations alike. TBH, might be best to go fish-free. instead.

#### Biodiversity loss causes extinction.

Torres 19[Phil; Affiliate Scholar at the Institute for Ethics and Emerging Technologies, Founder of the X-Risks Institute, Writer Appearing in Skeptic, Free Inquiry, Bulletin of the Atomic Scientists, Salon, Truthout, Erkenntnis, Metaphilosophy; “Biodiversity Loss: An Existential Risk Comparable To Climate Change,” Bulletin of the Atomic Scientists; 4/11/16; <https://thebulletin.org/2016/04/biodiversity-loss-an-existential-risk-comparable-to-climate-change/>] Justin

Catastrophic consequences for civilization. The consequences of this rapid pruning of the evolutionary tree of life extend beyond the obvious. There could be surprising effects of biodiversity loss that scientists are unable to fully anticipate in advance. For example, prior research has shown that localized ecosystems can undergo abrupt and irreversible shifts when they reach a tipping point. According to a 2012 paper published in Nature, there are reasons for thinking that we may be approaching a tipping point of this sort in the global ecosystem, beyond which the consequences could be catastrophic for civilization.

As the authors write, a planetary-scale transition could precipitate “substantial losses of ecosystem services required to sustain the human population.” An ecosystem service is any ecological process that benefits humanity, such as food production and crop pollination. If the global ecosystem were to cross a tipping point and substantial ecosystem services were lost, the results could be “widespread social unrest, economic instability, and loss of human life.” According to Missouri Botanical Garden ecologist Adam Smith, one of the paper’s co-authors, this could occur in a matter of decades—far more quickly than most of the expected consequences of climate change, yet equally destructive.

Biodiversity loss is a “threat multiplier” that, by pushing societies to the brink of collapse, will exacerbate existing conflicts and introduce entirely new struggles between state and non-state actors. Indeed, it could even fuel the rise of terrorism. (After all, climate change has been linked to the emergence of ISIS in Syria, and multiple high-ranking US officials, such as former US Defense Secretary Chuck Hagel and CIA director John Brennan, have affirmed that climate change and terrorism are connected.)

The reality is that we are entering the sixth mass extinction in the 3.8-billion-year history of life on Earth, and the impact of this event could be felt by civilization “in as little as three human lifetimes,” as the aforementioned 2012 Nature paper notes. Furthermore, the widespread decline of biological populations could plausibly initiate a dramatic transformation of the global ecosystem on an even faster timescale: perhaps a single human lifetime.

The unavoidable conclusion is that biodiversity loss constitutes an existential threat in its own right. As such, it ought to be considered alongside climate change and nuclear weapons as one of the most significant contemporary risks to human prosperity and survival.

## 4

### CP

#### CP text: The member nations of the WTO should:

#### ---Loan an additional 4 billion dollars of additional funding to close the pre-purchase gap of 350 million vaccines to achieve world-wide immunity

#### ---The World Bank should relax the conditions to receive a loan as per Goldberg 21

#### ---Eliminate export restriction on critical medicines during pandemics.

#### The CP solves pandemics better—the aff misidentifies the problem.

Goldberg 20 [PINELOPI KOUJIANOU; Former World Bank Group chief economist and editor-in-chief of the American Economic Review, Professor of Economics at Yale University; “Forget the Vaccine Patent Waiver,” Project Syndicate; 5/13/21; <https://www.project-syndicate.org/commentary/wto-vaccine-waiver-is-beside-the-point-by-pinelopi-koujianou-goldberg-2021-05>] Justin

What’s the issue, then? According to Agarwal and Reed, it is that companies are reluctant to activate their existing production capacity without pre-purchase commitments. There is currently a large gap between the number of doses that could be produced and the number that have been pre-ordered. And, as one would expect, this gap is unevenly distributed. High-income countries have ordered more doses than they need and thus will end up with a surplus, whereas lower-income countries are far behind in pre-purchasing vaccines. Under these circumstances, efforts to increase capacity by relaxing patent protections would do nothing to accelerate vaccinations in lower-income countries. A far more promising strategy is to help lower-income countries purchase vaccines, while channeling surplus doses from richer countries to wherever they are needed most. To a large extent, this strategy is already being implemented, thanks to the efforts of the COVAX Advanced Market Commitment facility, together with concessional loans by multilateral institutions such as the World Bank, and regional initiatives such as the one being led by the African Union. Remarkably, Agarwal and Reed show that the COVAX AMC facility and the AU initiative already have ensured that most African countries have ordered enough vaccines to cover at least 50% of their populations. Still, three critical challenges remain. First, closing the pre-purchase gap of 350 million vaccines will requires an additional $4 billion – a trivial cost relative to the potential benefit of achieving worldwide immunity. Providing this support, either through additional funding for the COVAX AMC facility or by sending surplus vaccines to developing countries as soon as possible, should not be too difficult or costly for high-income countries to manage. Second, the World Bank needs to relax its conditions for extending loans for vaccine pre-purchases. Currently, such loans can be used only for vaccines approved by three stringent regulatory authorities (SRAs) in three different regions. Among these are Japan and certain Western countries, which naturally prioritize approval of vaccines intended for their own populations. They have little incentive to grant emergency-use authorization to alternative vaccines that have shown high efficacy in Phase 3 clinical trials, such as Bharat Biotech’s Covaxin (India), and Gamaleya’s Sputnik V (Russia), and Sinovac Biotech’s CoronaVac (China). Extending the list of national regulators classified as SRAs would go a long way toward increasing lending for vaccine purchases.1 Finally, existing vaccine manufacturers will be unable to meet their production targets if vaccine nationalism gives rise to export restrictions on critical inputs and raw materials. We saw such behavior early in the pandemic with respect to personal protective equipment, but the resulting export restrictions proved short-lived. One hopes the same will be true for vaccines. International cooperation and coordination will be crucial in the coming months. There are many ways for advanced economies to assist poorer countries in vaccinating their populations as soon as possible. But relaxing patent protections – however appealing the idea may be in other contexts – is not one of them. The focus should be on providing additional funding and less restrictive lending for pre-ordering vaccines, and on funneling surpluses from high-income countries to the rest of the world.

## 5

### CP

#### Text: The member nations of the World Trade Organization ought to form and adhere to an international panel of science diplomats’ binding ruling to [insert plan].

#### They have the jurisdiction to rule over intellectual property and secure science diplomacy.

Hajjar and Greenbaum 18 [David; Dean Emeritus and University Distinguished Professor, and Professor of Biochemistry and Pathology at Weill Cornell Medicine, Cornell University. He is a Fellow of the American Academy of Arts and Sciences, Fellow of the American Association for the Advancement of Sciences, a Jefferson Science Fellow of the National Academies at the U.S. Department of State, and a recent Senior Fellow in Science Policy at the Brookings Institute; Steven; Professor and Chair of the Department of Physics and Astronomy at Hunter College of the City University of New York and a Fellow of the American Physical Society. He was a Jefferson Science Fellow of the National Academies at the U.S. Department of State; “Leveraging Diplomacy for Managing Scientific Challenges,” American Diplomacy; September 18; <https://americandiplomacy.web.unc.edu/2018/09/leveraging-diplomacy-for-managing-scientific-challenges-an-opportunity-to-navigate-the-future-of-science/>] Justin

At the global level, science diplomacy is defined as cooperation among countries in order to solve complex problems through scientific research and education (1). For example, science diplomacy plays an important role in resolving global issues related to the ecosystem (such as clean water, food safety, energy conservation, and preservation of the environment). It also addresses problems related to the healthcare industry. For example, scientists have served at the international level to forge the Middle Eastern Cancer Consortium a decade ago to facilitate better healthcare and improve cancer research in the region. Whether one considers science for diplomacy or diplomacy for science, international science collaborations benefit from allowing science diplomats (broadly defined as science envoys, science attaches, embassy fellows) to help establish positive international relationships between the U.S., Europe, Latin America, Africa or Asia, particularly when proprietary disputes arise (2, 3). These various types of science diplomats already exist; some, like embassy fellows and science envoys, have one-year appointments so their role may be limited, while attaches usually have two or three year appointments that may allow them to be more successful in long, protracted negotiations. In any event, we believe that scientists can play more of a role in advancing international scientific cooperation. A key point addressed here is how to balance security concerns against the need for free exchange of information needed for innovation and growth. Both the National Science Foundation and the National Institutes of Health are already engaged in supporting American science and strengthening collaborations abroad. Such efforts take advantage of international expertise, facilities, and equipment. Here, we provide a rationale for the use of diplomacy to address scientific challenges. This approach allows some scientists working as diplomats to help manage complex and potentially conflicting situations that arise between scientific communities and their governments. Such issues include managing disputes such as licensing agreements for intellectual property (IP) and providing protection of IP. International collaborations can not only support but also accelerate the advancement of science. However, collaborations may carry risk if IP is misappropriated for other purposes. International collaborations should have a basis in strategy and specific goals (for example, drug discovery) in order to justify the use of government and/or corporate funds. About a decade ago, a group of academics from the University of Manchester in the United Kingdom assembled the “Manchester Manifesto,” subtitled “Who Owns Science” (6). This document addressed the lack of alignment between commercial interests, intellectual rights, and credit to the researcher. In our (and commonly held) view, the groups representing these disparate values could benefit from diplomatic mediation. More recently, it has become increasing apparent that managing China as a science and technology superpower represents another challenge for the U.S. Resolution of issues such as ownership of IP, rights to reagents, or use of skilled laboratory personnel from international collaborations may require the efforts of science diplomats. There are few international offices or “guardians” to protect junior and senior scientists in corporate or academic sectors from misuse of reagents or piracy. China’s failure to respect IP rights, and the resulting piracy, has drawn much attention. The media have also focused on the failure of watchdog government agencies to detect and manage these unwanted activities. Industrial espionage compromises U.S. interests. Moreover, Chinese and Russian hackers have cyberattacked U.S. technology companies, financial institutions, media groups, and defense contractors. In 2018, industrial spying was even reported in a major medical school in New York City where scientists were alleged to have illegally shared research findings with Chinese companies. The U.S. has a long history of hiring research personnel from other countries to staff its laboratories and industrial R&D centers. These scientists and engineers have made critical contributions to our nation’s well-being and security. These young Chinese and South Asian graduates of U.S. programs a generation ago now staff our research enterprise. However, recent trends in U.S. graduate school applications in science, technology, engineering and mathematics (STEM) reflect a downturn in foreign applicants, particularly from China. It is becoming increasingly apparent that the number of American-born students seeking STEM degrees is not sufficient to satisfy future demands of our high-tech workforce. While our own educational reforms must be augmented, we cannot ignore the need to continue to recruit overseas talent. We believe that foreign scientists can continue to make critical discoveries in the U. S. provided that their talent is nurtured, developed, and harnessed for the common good. At the same time, American companies cannot hire foreign scientists if they take the ideas they generate in U.S. laboratories back to their home countries without proper credit or permission. If the advancement of science is to succeed, greater diplomatic cooperation is needed to solve and manage proprietary issues for the benefit of all (5, 6). So, how does one strike the proper balance between security and growth? Science is a universal social enterprise; international conferences lead to friendships and productive collaborations between nations. Given that the U.S. and Chinese governments recognize the need for international communication and collaboration then surely there should be a mechanism for adjudicating anticipated conflicts. One approach would be for government, industrial, and academic stakeholders to form an international panel of scientists and engineers to manage any conflicts of interest between the need to protect proprietary information crucial to a company’s competitive edge, and the need for students and young faculty members to publish their findings. Smaller scale efforts along these lines have recently given rise to unique global partnerships, such as fellowship support by major pharmaceutical companies, which aim to address these conflicts to the benefit of both parties. An added feature of such arrangements is that they often provide corporate financing for research (9). Can this corporate-academic partnership model be adapted to multinational joint R&D efforts while protecting IP? This question falls squarely within the purview of international science diplomacy, whereby science diplomats can establish rules of conduct governing joint global technology development with proper IP protection. Despite the highly publicized and legitimate piracy allegations against China, at least some data indicates that the Chinese legal system is responding positively to worldwide pressure to honor foreign IP. A 2016 study by Love, Helmers, and Eberhardt, for example, found that between 2006 and 2011, foreign companies brought over 10 percent of patent infringement cases in China, and won over 70 percent of those cases (10). Today, “win rates” average around 80 percent, and “injunction rates,” around 98 percent (10). As Chinese scientists and engineers increasingly enter the top tier of the innovation space, their growing awareness of their own need for IP protection could be a powerful motivating force for the protection of all IP. As stated earlier, science diplomats could catalyze this progress even further by direct negotiations with those parties involved in the conflicts. An obvious flaw in this optimistic outlook is that scientists in the U.S. wield more influence with their government than scientists in China wield with theirs. And to the extent that the Chinese government could be encouraging IP theft, this must be addressed first by those international companies/firms who want to do business with the Chinese. Chinese investments, as well as tech incubators and targeted acquisitions, can enable access to U.S. technologies for commercial development. Although this conveys a level of risk to the developers, it may provide valuable opportunities for U.S. companies as well. In many respects, the extensive engagement and collaboration in innovation between the U.S. and China, often characterized by open exchanges of ideas, talent, and technologies, can be mutually beneficial in enriching and accelerating innovation in both countries. In summary, we believe that science diplomats could help address the increasingly complex issues that arise between accelerating scientific and engineering advances, and the need to protect national security and corporate IP. We also propose that this might be accomplished by asking the **National Academies to recommend academic, corporate, and government scientific leaders to serve on an international scientific advisory board**, and for the corresponding organizations in other countries to do the same. Access to the free flow of information promotes new knowledge and innovation. A return to a more restrictive intellectual environment is not only harmful to progress, but also nearly impossible to manage in the current internet age. A good place to start would be to engage the newly appointed head of the White House Office of Science and Technology Policy (the Science Advisor to the President of the United States), and working groups within established organizations. These organizations include the American Association for the Advancement of Science (AAAS) or the National Academies of Science, Engineering and Medicine, and corresponding international organizations. What incentive is there for a busy and successful scientist to serve in such capacity? It is the same altruism that motivates us to accept assignments as journal editors, manuscript reviewers, or funding agency panelists for the advancement of science toward the greater good.

#### COVID exposed weaknesses in science diplomacy—revitalizing it is key to solving every existential threat.

Gluckman and Turekian 20 [Peter and Vaughan; 6/17/20; Sir Peter Gluckman is the chair of the International Network for Government Science Advice, director of Koi Tū: The Centre for Informed Futures at the University of Auckland, and former science adviser to the New Zealand prime minister. Vaughan Turekian is the executive director of policy and global affairs at the National Academies of Sciences, Engineering, and Medicine and a former science and technology adviser to the US secretary of state; “Rebooting Science Diplomacy in the Context of COVID-19,” Issues, <https://issues.org/rebooting-science-diplomacy-in-the-context-of-covid-19-lessons-from-the-cold-war/>] Justin

The COVID-19 pandemic is amplifying preexisting tensions between the United States and China across all domains, including science and technology. This is happening even as global science and technology cooperation has become a central feature of public health and the development of vaccines and treatments. Does this new dynamic between the two powers accurately reflect a changed world, and could it presage greater tension to come? The United States’ and China’s different political and economic models and distinct domestic and global interests create rising tensions as their soft power footprints (and increasingly hard power influences) span the globe. This places many other nations in a position not unlike that during the Cold War, when countries found themselves uneasily sitting between two elephants, the United States and the Soviet Union, pulling in different directions. We do not know whether today’s US-China tension will settle into an uncomfortable status quo or lead to a progressive decoupling or a more rapid severance between the two economic giants. It might even develop into a more stable and constructive relationship. This creates an opportunity for science diplomacy to again help bridge the gap between two major powers with conflicting worldviews, as happened in the Cold War. Important lessons from the science diplomacy of that era may help inform how best to respond in the current geopolitical context. Science diplomacy between 1945 and 1991 played an important role in preventing US-Soviet relations from degrading into mutual destructiveness. It led to the establishment of critical institutions and initiatives that advanced scientific understandings that underpinned critical agreements. Through the 1950s, 1960s, and 1970s, scientists working with or without the explicit support of their governments played crucial roles in ensuring some level of civility and progress in the otherwise tense superpower relationship. Some examples are illustrative. Prompted by a recommendation from the International Council of Scientific Unions (ICSU), the major powers agreed on the 1957–58 International Geophysical Year that led to the signing of the Antarctic Treaty in 1959, ensuring that Antarctica was a place for peaceful scientific purposes rather than for exploitative or military gain. In the 1960s Soviet Premier Alexei Kosygin and US President Lyndon Johnson worked to establish the International Institute for Applied Systems Analysis, which focused on collaborative research between the major powers and their partners in areas that are now of increasing importance, such as the nexus of energy, water, and food. In 1985 the United States and the Soviet Union became two of the founding signatories for the Vienna convention for the protection of the ozone layer. Remarkably, collaboration between the superpowers grew even in areas that might be sensitive, such as space; the American Apollo and Soviet Soyuz spacecraft docked in orbit in 1975, and the two nations signed a joint agreement on space cooperation in 1987. Scientists working with or without the explicit support of their governments played crucial roles in ensuring some level of civility and progress in the otherwise tense superpower relationship. A critical lesson learned during this era was that science focused on fundamental questions and global processes could help in maintaining connections and building understanding, even in the face of growing political and security tensions. In this context, institutions including academies of science, international organizations such as ICSU, and United Nations technical organizations provided important conduits for collaboration. The role of science in diplomacy became more widespread following the collapse of the Soviet Union in 1991. Science diplomacy played a constructive role in approaching global issues such as climate change, biodiversity loss, sustainable development, and global health. These are areas where international science flourishes, and the value of this cooperation is plain to see. But they are also areas where science diplomacy translated into policy in the forms of conventions, treaties, and agreements—most notably with the Intergovernmental Panel on Climate Change, which provided space for developing international cooperation around climate science even as the politics of climate policy were more difficult to address. Other agreements—such as the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, the Convention on Biological Diversity, and numerous lower-profile partnerships—provided ways to engage science well before broader international policy regimes around thorny global issues could be adequately addressed. Such is the backdrop to the growing and serious US-China rivalry. The rising health, economic, and societal impacts of COVID-19, and accusations about responsibility for them, have greatly fuelled mutual suspicion and antagonism. Yet the world is looking for a sense of equilibrium between the great powers. Countries such as Australia and New Zealand find themselves increasingly stretched between their trading dependency with China and their historical, security, and political ties with the United States. Smaller nations that rely heavily on the multilateral rules-based order through the World Trade Organization and for technical help though bodies such as the World Health Organization fear that the US-China tension is undermining core elements of this system. RISING SUPERPOWERS, RISING TENSIONS China has moved rapidly to the leading edge in many domains of science. It has invested heavily in building advanced research infrastructures and a skilled technical workforce. Hundreds of thousands of Chinese students, research fellows, and scholars have studied in the West. China is now the second largest source of scientific papers after the United States, and an increasing number involve international coauthorship—with more than 40% having US-based coauthors. Thus there is the latent base for extended East-West cooperation. But China’s ascendance as a superpower is not without concerns about integrity. There is ongoing wariness about scientific espionage in potentially commercially important areas, including intellectual property management and technology transfer. At the same time, law enforcement agencies in the United States and other Western economies are suspicious of Chinese theft of cutting-edge research and technology. All contribute to a sense within many Western policy circles that some forms of scientific misconduct are endemic in China. The rising health, economic, and societal impacts of COVID-19, and accusations about responsibility for them, have greatly fuelled mutual suspicion and antagonism. COVID-19 has amplified concerns, as accusations flow about the availability and accuracy of Chinese data on the origin and impact of the SARS-CoV-2 virus that causes the disease. But there are also concerns about the veracity of some of the US data. Leading Western scientific journals have retracted suspicious results regarding the treatment of COVID-19; the choice of drugs has been politicized. There are disagreements about the accuracy of COVID-19 death counts promulgated by the White House versus those from the US Centers for Disease Control and Prevention. At the same time, the Trump administration’s withdrawal of funding from WHO has increased international concerns about the politicization of the pandemic and the breakdown of the international technical agencies that were designed to address global challenges. As the United States moves its focus away from the international stage and toward an “America First” policy, China has filled that space with a greater presence in the various bodies of the United Nations and an increasing range of multinational partnerships. Science has become a critical component of Chinese efforts to expand influence over international policies and relationships. One example is the Belt and Road Initiative, which while designed to build greater economic ties across Eurasia and Africa has also established a significant scientific and technological component, including its own international scientific organization. The initiative refers often to the UN Sustainable Development Goals, which reinforces a perception that China’s foreign policy goals are well-aligned with globally agreed upon measures. Within the COVID-19 crisis, science has shown a remarkable willingness to work across national and organizational boundaries. Similar to how diverse stakeholders came together in the West Africa Ebola outbreak of 2014–16, academic organizations, philanthropy, and the private sector have worked across country borders to develop broader science understandings of the COVID-19 challenge and approaches to solving it. WHO has launched the Solidarity trial, which involves investigators in over 35 countries, as well as a technology access pool to share information and data. The US National Academies of Sciences, Engineering, and Medicine is working with a US-based nongovernmental organization to help advise the Africa Centres for Disease Control and Prevention on the use and effectiveness of nonpharmaceutical interventions. But unlike earlier health challenges, COVID-19 is also being used within official government engagements to exacerbate tensions. Competition is underway to not only frame blame for the pandemic but to develop countermeasures domestically. Science can use its tools of informal diplomacy to try to reduce tensions. This will require global scientific organizations and individual scientists to recognize that their contribution to society is more than just building knowledge; it also involves building relationships and reducing tensions. This is truer today than at any time since the end of the Cold War 30 years ago. We need both formal and informal science diplomacy to play their role in navigating the rocky path ahead. Increasing and using science diplomacy will not be easy given the broad suspicions on both sides and the growing awareness of the coupling between scientific and economic competition between the two major powers. The tensions between the United States and China are distinct from those between the United States and the Soviet Union through most of the second half of the twentieth century. Societies, including the scientific community, are much more intertwined today at all levels. At the same time, the breakdown of many post-World War II institutions, and the growing trend toward nationalism and isolationism in the West, leaves a major gap in the infrastructure that would be needed to support technical discussions on global issues. Unlike earlier health challenges, COVID-19 is also being used within official government engagements to exacerbate tensions. But there are some opportunities. Both China and the United States are active in a number of multilateral scientific organizations, such as the International Science Council (ISC), which succeeded ICSU in 2018 and has been looking at ways to adapt to the new realities. Working through ISC to develop principles for science cooperation and conduct could provide an important framework for developing a set of norms and standards that could be applied to science writ large. It would also build an early foundation for broader technical discussions among scientists. After the Chernobyl nuclear accident in 1986, countries with very different political views rapidly agreed on a Convention on Early Notification of a Nuclear Accident—signed even while the Cold War raged. Could the scientific community define the basis of a similar convention to alert the global community to an emerging disease from a novel organism that jumped from an animal into humans? Such an agreement could provide for the time-critical sharing of biosamples and data. The ISC and its members have the expertise and nonpartisan basis to develop the scientific criteria for such a convention. And given that both US and Chinese commentators have made allegations regarding the origins of the COVID-19 virus in the other’s military research, it may be time to address the lack of a scientific support system for the Biological Weapons Convention. This lack of support, 45 years after the convention came into force, is in marked distinction to that related to chemical weapons. Recall the lessons from the Cold War. One is the need to focus on areas and topics of mutual interest and concern, such as space, cutting-edge energy projects, and global health. Another is to focus on building institutional links, either by taking advantage of existing institutions of science or, when opportunities arise, creating new ones. In this endeavor, nongovernmental or quasigovernmental organizations are particularly important. But shared interest between the Americans and Soviets around technically based global challenges such as Antarctica and the loss of the ozone layer also provided an important means to overcome political mistrust to work toward common, science-based solutions. Perhaps the United States and China, joined by allies on both sides, could develop new projects and facilities to explore and understand the physics and biology of the oceans—which, while often involving critical strategic and economic interests, is an arena where scientists can work together outside traditional political venues to develop better understandings. Whatever the area of focus, both sides of the Pacific need to recognize that the status quo is not sustainable. New systems and new approaches will be critical for advancing the science while leaving open important communication avenues for diplomacy.

## 6

### NC

#### The standard is maximizing expected well-being—to clarify, saving lives.

Paterson 1 – Department of Philosophy, Providence College, Rhode Island. (Craig, “A Life Not Worth Living?”, Studies in Christian Ethics, <http://sce.sagepub.com>)

Contrary to those accounts, I would argue that it is death per se that is really the objective evil for us, not because it deprives us of a prospective future of overall good judged better than the alter- native of non-being. It cannot be about harm to a former person who has ceased to exist, for no person actually suffers from the sub-sequent non-participation. Rather, death in itself is an evil to us because it ontologically destroys the current existent subject — it is the ultimate in metaphysical lightening strikes.80 The evil of death is truly an ontological evil borne by the person who already exists, independently of calculations about better or worse possible lives. Such an evil need not be consciously experienced in order to be an evil for the kind of being a human person is. Death is an evil because of the change in kind it brings about, a change that is destructive of the type of entity that we essentially are. Anything, whether caused naturally or caused by human intervention (intentional or unintentional) that drastically interferes in the process of maintaining the person in existence is an objective evil for the person. What is crucially at stake here, and is dialectically supportive of the self-evidency of the basic good of human life, is that death is a radical interference with the current life process of the kind of being that we are. In consequence, death itself can be credibly thought of as a ‘primitive evil’ for all persons, regardless of the extent to which they are currently or prospectively capable of participating in a full array of the goods of life.81  In conclusion, concerning willed human actions, it is justifiable to state that any intentional rejection of human life itself cannot therefore be warranted since it is an expression of an ultimate disvalue for the subject, namely, the destruction of the present person; a radical ontological good that we cannot begin to weigh objectively against the travails of life in a rational manner. To deal with the sources of disvalue (pain, suffering, etc.) we should not seek to irrationally destroy the person, the very source and condition of all human possibility.82

#### Don’t let the 1AR shift to a new framing mechanism—they don’t have a standard in the 1AC and anything else justifies infinite aff shiftiness and skews neg ground—the alternative to extinction first framing is no framing so prefer our FW despite shortcomings.

#### Prefer for actor spec—governments must use util because they don’t have intentions and are constantly dealing with tradeoffs—outweighs since different agents have different obligations—takes out calc indicts since they are empirically denied.

#### Impact calc – extinction outweighs:

#### A] Structural violence- death causes suffering because people can’t get access to resources and basic necessities

#### B] Objectivity- body count is the most objective way to calculate impacts because comparing suffering is unethical

#### C] Comes before value-to-life.

Tännsjö 11 (Torbjörn, the Kristian Claëson Professor of Practical Philosophy at Stockholm University, “Shalt Thou Sometimes Murder? On the Ethics of Killing,” <http://people.su.se/~jolso/HS-texter/shaltthou.pdf>) //BS 1-27-2018

\*\*Bracketed to avoid triggers

I suppose it is correct to say that, if Schopenhauer is right, if life is never worth living, then according to utilitarianism we should all [die] commit suicide and put an end to humanity. But this does not mean that, each of us should commit suicide. I commented on this in chapter two when I presented the idea that utilitarianism should be applied, not only to individual actions, but to collective actions as well.¶ It is a well-known fact that people rarely commit suicide. Some even claim that no one who is mentally sound commits suicide. Could that be taken as evidence for the claim that people live lives worth living? That would be rash. Many people are not utilitarians. They may avoid suicide because they believe that it is morally wrong to kill oneself. It is also a possibility that, even if people lead lives not worth living, they believe they do. And even if some may believe that their lives, up to now, have not been worth living, their future lives will be better. They may be mistaken about this. They may hold false expectations about the future.¶ From the point of view of evolutionary biology, it is natural to assume that people should rarely commit suicide. If we set old age to one side, it has poor survival value (of one’s genes) to kill oneself. So it should be expected that it is difficult for ordinary people to kill themselves. But then theories about cognitive dissonance, known from psychology, should warn us that we may come to believe that we live better lives than we do.¶ My strong belief is that most of us live lives worth living. However, I do believe that our lives are close to the point where they stop being worth living. But then it is at least not very far-fetched to think that they may be worth not living, after all. My assessment may be too optimistic.¶ Let us just for the sake of the argument assume that our lives are not worth living, and let us accept that, if this is so, we should all kill ourselves. As I noted above, this does not answer the question what we should do, each one of us. My conjecture is that we should not [die] commit suicide. The explanation is simple. If I [die] kill myself, many people will suffer. Here is a rough explanation of how this will happen: ¶ ... suicide “survivors” confront a complex array of feelings. Various forms of guilt are quite common, such as that arising from (a) the belief that one contributed to the suicidal person's anguish, or (b) the failure to recognize that anguish, or (c) the inability to prevent the suicidal act itself. Suicide also leads to rage, loneliness, and awareness of vulnerability in those left behind. Indeed, the sense that suicide is an essentially selfish act dominates many popular perceptions of suicide. ¶ The fact that all our lives lack meaning, if they do, does not mean that others will follow my example. They will go on with their lives and their false expectations — at least for a while devastated because of my suicide. But then I have an obligation, for their sake, to go on with my life. It is highly likely that, by committing suicide, I create more suffering (in their lives) than I avoid (in my life).

#### D] Mathematically outweighs.

MacAskill 14 [William, Oxford Philosopher and youngest tenured philosopher in the world, Normative Uncertainty, 2014]

The human race might go extinct from a number of causes: asteroids, supervolcanoes, runaway climate change, pandemics, nuclear war, and the development and use of dangerous new technologies such as synthetic biology, all pose risks (even if very small) to the continued survival of the human race.184 And different moral views give opposing answers to question of whether this would be a good or a bad thing. It might seem obvious that human extinction would be a very bad thing, both because of the loss of potential future lives, and because of the loss of the scientific and artistic progress that we would make in the future. But the issue is at least unclear. The continuation of the human race would be a mixed bag: inevitably, it would involve both upsides and downsides. And if one regards it as much more important to avoid bad things happening than to promote good things happening then one could plausibly regard human extinction as a good thing.For example, one might regard the prevention of bads as being in general more important that the promotion of goods, as defended historically by G. E. Moore,185 and more recently by Thomas Hurka.186 One could weight the prevention of suffering as being much more important that the promotion of happiness. Or one could weight the prevention of objective bads, such as war and genocide, as being much more important than the promotion of objective goods, such as scientific and artistic progress. If the human race continues its future will inevitably involve suffering as well as happiness, and objective bads as well as objective goods. So, if one weights the bads sufficiently heavily against the goods, or if one is sufficiently pessimistic about humanity’s ability to achieve good outcomes, then one will regard human extinction as a good thing.187 However, even if we believe in a moral view according to which human extinction would be a good thing, we still have strong reason to prevent near-term human extinction. To see this, we must note three points. First, we should note that the extinction of the human race is an extremely high stakes moral issue. Humanity could be around for a very long time: if humans survive as long as the median mammal species, we will last another two million years. On this estimate, the number of humans in existence in the The future, given that we don’t go extinct any time soon, would be 2×10^14. So if it is good to bring new people into existence, then it’s very good to prevent human extinction. Second, human extinction is by its nature an irreversible scenario. If we continue to exist, then we always have the option of letting ourselves go extinct in the future (or, perhaps more realistically, of considerably reducing population size). But if we go extinct, then we can’t magically bring ourselves back into existence at a later date. Third, we should expect ourselves to progress, morally, over the next few centuries, as we have progressed in the past. So we should expect that in a few centuries’ time we will have better evidence about how to evaluate human extinction than we currently have. Given these three factors, it would be better to prevent the near-term extinction of the human race, even if we thought that the extinction of the human race would actually be a very good thing. To make this concrete, I’ll give the following simple but illustrative model. Suppose that we have 0.8 credence that it is a bad thing to produce new people, and 0.2 certain that it’s a good thing to produce new people; and the degree to which it is good to produce new people, if it is good, is the same as the degree to which it is bad to produce new people, if it is bad. That is, I’m supposing, for simplicity, that we know that one new life has one unit of value; we just don’t know whether that unit is positive or negative. And let’s use our estimate of 2×10^14 people who would exist in the future, if we avoid near-term human extinction. Given our stipulated credences, the expected benefit of letting the human race go extinct now would be (.8-.2)×(2×10^14) = 1.2×(10^14). Suppose that, if we let the human race continue and did research for 300 years, we would know for certain whether or not additional people are of positive or negative value. If so, then with the credences above we should think it 80% likely that we will find out that it is a bad thing to produce new people, and 20% likely that we will find out that it’s a good thing to produce new people. So there’s an 80% chance of a loss of 3×(10^10) (because of the delay of letting the human race go extinct), the expected value of which is 2.4×(10^10). But there’s also a 20% chance of a gain of 2×(10^14), the expected value of which is 4×(10^13). That is, in expected value terms, the cost of waiting for a few hundred years is vanishingly small compared with the benefit of keeping one’s options open while one gains new information.

#### E] Err AFF – psychological bias runs towards threat deflation

Schweller 04 (Randall L., Associate Professor in the Department of Political Science at The Ohio State University, “Unanswered Threats A Neoclassical Realist Theory of Underbalancing,” International Security, Volume 29, Issue 2, pg. 159-201, Project Muse)

Despite the historical frequency of underbalancing, little has been written on the subject. Indeed, Geoffrey Blainey's memorable observation that for "every thousand pages published on the causes of wars there is less than one page directly on the causes of peace" could have been made with equal veracity about overreactions to threats as opposed to underreactions to them.92 Library shelves are filled with books on the causes and dangers of exaggerating threats, ranging from studies of domestic politics to bureaucratic politics, to political psychology, to organization theory. By comparison, there have been few studies at any level of analysis or from any theoretical perspective that directly explain why states have with some, if not equal, regularity underestimated dangers to their survival. There may be some cognitive or normative bias at work here. Consider, for instance, that there is a commonly used word, paranoia, for the unwarranted fear that people are, in some way, "out to get you" or are planning to do one harm. I suspect that just as many people are afflicted with the opposite psychosis: the delusion that everyone loves you when, in fact, they do not even like you. Yet, we do not have a familiar word for this phenomenon. Indeed, I am unaware of any word that describes this pathology (hubris and overconfidence come close, but they plainly define something other than what I have described). That noted, international relations theory does have a frequently used phrase for the pathology of states' underestimation of threats to their survival, the so-called Munich analogy. The term is used, however, in a disparaging way by theorists to ridicule those who employ it. The central claim is that the naïveté associated with Munich and the outbreak of World War II has become an overused and inappropriate analogy because few leaders are as evil and unappeasable as Adolf Hitler. Thus, the analogy either mistakenly causes leaders [End Page 198] to adopt hawkish and overly competitive policies or is deliberately used by leaders to justify such policies and mislead the public. A more compelling explanation for the paucity of studies on underreactions to threats, however, is the tendency of theories to reflect contemporary issues as well as the desire of theorists and journals to provide society with policy- relevant theories that may help resolve or manage urgent security problems. Thus, born in the atomic age with its new balance of terror and an ongoing Cold War, the field of security studies has naturally produced theories of and prescriptions for national security that have had little to say about—and are, in fact, heavily biased against warnings of—the dangers of underreacting to or underestimating threats. After all, the nuclear revolution was not about overkill but, as Thomas Schelling pointed out, speed of kill and mutual kill. Given the apocalyptic consequences of miscalculation, accidents, or inadvertent nuclear war, small wonder that theorists were more concerned about overreacting to threats than underresponding to them. At a time when all of humankind could be wiped out in less than twenty-five minutes, theorists may be excused for stressing the benefits of caution under conditions of uncertainty and erring on the side of inferring from ambiguous actions overly benign assessments of the opponent's intentions. The overwhelming fear was that a crisis "might unleash forces of an essentially military nature that overwhelm the political process and bring on a war thatnobody wants. Many important conclusions about the risk of nuclear war, and thus about the political meaning of nuclear forces, rest on this fundamental idea." Now that the Cold War is over, we can begin to redress these biases in the literature. In that spirit, I have offered a domestic politics model to explain why threatened states often fail to adjust in a prudent and coherent way to dangerous changes in their strategic environment. The model fits nicely with recent realist studies on imperial under- and overstretch. Specifically, it is consistent with Fareed Zakaria's analysis of U.S. foreign policy from 1865 to 1889, when, he claims, the United States had the national power and opportunity to expand but failed to do so because it lacked sufficient state power (i.e., the state was weak relative to society).95 Zakaria claims that the United States did [End Page 199] not take advantage of opportunities in its environment to expand because it lacked the institutional state strength to harness resources from society that were needed to do so. I am making a similar argument with respect to balancing rather than expansion: incoherent, fragmented states are unwilling and unable to balance against potentially dangerous threats because elites view the domestic risks as too high, and they are unable to mobilize the required resources from a divided society. The arguments presented here also suggest that elite fragmentation and disagreement within a competitive political process, which Jack Snyder cites as an explanation for overexpansionist policies, are more likely to produce underbalancing than overbalancing behavior among threatened incoherent states.96 This is because a balancing strategy carries certain political costs and risks with few, if any, compensating short-term political gains, and because the strategic environment is always somewhat uncertain. Consequently, logrolling among fragmented elites within threatened states is more likely to generate overly cautious responses to threats than overreactions to them. This dynamic captures the underreaction of democratic states to the rise of Nazi Germany during the interwar period. In addition to elite fragmentation, I have suggested some basic domestic-level variables that regularly intervene to thwart balance of power predictions.

# Case

## Framing

### 1NC – AT: FW

#### Reject framing arguments that parameterize content – debate should be an open forum to attack ideas from different directions – anything else brackets out modes of knowledge production which they would disagree with.

## Advantage

### 1NC – Circumvention

#### Circumvention – WTO doesn’t have the jurisdiction.

* Process takes 5 years and the 18 months to get a report

Patnaik 21 [Priti; 3/12/21; Founding Editor, Geneva Health Files; “Could Vaccine Nationalism Spur Disputes At The WTO; TRIPS Waiver Talks Update,” Geneva Health Files, <https://genevahealthfiles.substack.com/p/could-vaccine-nationalism-spur-disputes>] Justin

Hi, From the view on the street in Geneva, pandemic policy-making is unmistakably being shaped at the World Trade Organization, riding on the momentum generated when Director-General Ngozi took office earlier this month. After speaking on her first day at work at the General Council meeting earlier this month, her interventions on addressing the trade aspects of fighting the pandemic have been swift. She also spoke at the COVID-19 Vaccines Manufacturing Summit earlier this week. Alongside the political discussions on the TRIPS waiver, a few countries have come together asking her direct intervention to alleviate production shortages of vaccines by engaging with the industry. We bring all this for you, and more in this edition. In our story this week, we explore the possibility of whether vaccine nationalism can result in disputes at the WTO. The opinion on this divided. However, we would not be surprised if commercial and political interests eventually far outweigh the public health implications of such potential disputes. We also bring you a brief update on the TRIPS waiver discussions at the TRIPS Council meeting at WTO from earlier this week. Seasoned watchers believe that the waiver might just be able to get a critical mass of support. Stay tuned, it is going to get interesting and not pretty. Vacuous statements on solidarity that we have witnessed from political leaders might finally translate into some real meaning in the coming weeks and months. Read these stories collectively. One leads to the other. It has been interesting to report on the pandemic with issues simultaneously straddling these different worlds of health and trade. In other news from us, happy to share that Geneva Health Files participated in this report on how the institutions of International Geneva responded to policy-making for the pandemic. (“Covid-19: Que Fait La Genève Internationale? by Annick Chevillot) Finally, we continue to be encouraged by the steadily growing numbers of our supporters. We are making it work because of you. Thank you. Do spread the word around and let your tribe grow! Please note that we are making an exception and will make this exclusive edition public after a few days, to accommodate regular readers who are in the process of making a transition into paid subscriptions. Thank you for understanding. Until next week! Best, Priti Write to us: patnaik.reporting@gmail.com or genevahealthfiles@protonmail.com; Follow us on Twitter: @filesgeneva 1. Story of the week WILL VACCINE NATIONALISM LEAD TO WTO DISPUTES? Experts believe that the solution to vaccine nationalism is not filing disputes, but negotiations. But lawyers anticipate disputes even if filed simply for political leverage. Vaccine nationalism, a condition that has flourished during COVID-19, is loosely understood as the tendency of countries to hoard vaccines. But protectionist trade practices of hoarding medical supplies began as soon as the pandemic hit. This is now taking a serious turn with export restriction measures adopted by some countries. This could lead to a real possibility of countries taking the legal route to file disputes at the WTO, even if only for political leverage, experts say. Geneva Health Files spoke to legal experts, lawyers and delegations of some countries for this story. Will rising protectionism to address the pandemic relate to a rash of WTO disputes? Yes and no, depending on who you speak to. Earlier this week, Ngozi Okonjo-Iweala, WTO DG, said that 59 members and 7 observers, had some pandemic-related export restrictions or licensing requirements in place at the end of February, primarily for personal protective equipment. She pointed out that these figures were lower than the 91 countries that had brought in such measures over the past year. Image Credit: Photo by Anete Lusina from Pexels EU-AUSTRALIA When EU announced measures for export authorization earlier this year, amidst prevailing conditions of scarcity of vaccines production, it was met with near-ubiquitous criticism. Our interest was piqued when Italy decided to block export of AstraZeneca vaccine doses to Australia. It is understood that Australia had discussed these concerns with DG Ngozi. It was reported that Australia intended to work with other countries including Canada, Japan, Norway and New Zealand, “to pressure European officials in Brussels as a group.” We reached out to the Australian Permanent Mission to the WTO in Geneva, to find out if the country had plans to file a dispute. In response to our question on whether there has been any formal consideration at this stage to file a WTO dispute against the EU, a spokesperson of the mission answered in the negative. “Australia intends to work cooperatively with like-minded states, including the EU, to deliver vaccines as a global good. Our view is that vaccines should not be subject to restrictive trade measures,” the spokesperson told Geneva Health Files. We were also told that Australia’s Minister for Trade, Dan Tehan had spoken to the EU Trade Commissioner Valdis Dombrovkis on Australia’s approach. The spokesperson also confirmed that the minister had spoken to the WTO DG on the matter. Does this mean we will witness no disputes as a result of protectionist measures during the pandemic, will countries opt for negotiation over a litigious route to address vaccine shortages? WILL DISPUTES ARISE? One Geneva-based trade source on the condition of anonymity said, “The way the EU was excoriated at the [WTO] General Council meeting (earlier this month), in response to its trade restriction measures, shows that this issue will not go away anytime soon. There is a real possibility of members filing disputes.” (One diplomatic source called discussions at the General Council meeting last week as “a slaughterhouse”) The view on whether members will rush in to file disputes is divided – not the least because of what it means to go through the dispute settlement process at the WTO in the midst of a pandemic. For one, there is the issue of time constraints. Disputes at the WTO can take long. This is apart from the current crisis facing the international trade court – WTO’s Appellate Body which is not currently functional. Disputes around the pandemic will need to be resolved quickly to have any impact. It could take up to 18 months to get a panel report in the WTO disputes settlement system. So experts feel that WTO disputes system may not be suitable for these kinds of urgent challenges. While it is too soon to dismiss the possibility of trade disputes, experts believe that the way to address competition for medical products during the pandemic will be through negotiation. Experts point to the 2001 dispute brought by the U.S. against Brazil, during the AIDS crisis, which ended up as mutually agreed solution. (See DS199: Brazil — Measures Affecting Patent Protection). The dispute involved Brazil’s local working requirements in its industrial property law. Joost Pauwelyn, Professor of International Law, who also heads the department at The Graduate Institute in Geneva, believes that the focus is and should be on finding solutions, practical ways to address concerns, not litigation. Last year, Pauwelyn analysed the legal framework of export restrictions at the EU and WTO level. (See Export Restrictions in Times of Pandemic: Options and Limits under International Trade Agreements) "There is no GATT/WTO ruling that addresses the issue (of the use of export restrictions in the health area) directly. The IP-related disputes that arose during the AIDS crisis were negotiated. It was dealt with at the political level (TRIPS council, General Council etc.) and ultimately via a waiver and TRIPS treaty amendment, not in the dispute settlement system," Pauwelyn says. Asked whether the crisis in the Appellate Body will dissuade countries from filing disputes, Pauwelyn says, “WTO dispute settlement is currently broken given the option to block panel outcomes to a non-existent Appellate Body. In addition, the process takes about 4-5 years, but under this status quo, it means that by the time the case is settled, the world may already be facing the next pandemic so to speak. So in practical terms, filing a dispute could be a non-starter.”

### 1NC – Infrastructure Deficit

#### mRNA experts – there are shortages.

Garde et al 21 [Damian Garde (National Biotech Reporter), Helen Branswell (Senior Writer, Infectious Disease)Matthew Herper (Senior Writer, Medicine, Editorial Director of Events), 5/6/21, Waiver of patent rights on Covid-19 vaccines, in near term, may be more symbolic than substantive, <https://www.statnews.com/2021/05/06/waiver-of-patent-rights-on-covid-19-vaccines-in-near-term-may-be-more-symbolic-than-substantive/>] Justin

In October, Moderna vowed not to enforce its Covid-19-related patents for the duration of the pandemic, opening the door for manufacturers that might want to copy its vaccine. But to date, it’s unclear whether anyone has, despite the vaccine’s demonstrated efficacy and the worldwide demand for doses.

That underscores the drug industry’s case that patents are just one facet of the complex process of producing vaccines.

“There are currently no generic vaccines primarily because there are hundreds of process steps involved in the manufacturing of vaccines, and thousands of check points for testing to assure the quality and consistency of manufacturing. One may transfer the IP, but the transfer of skills is not that simple,” said Norman Baylor, who formerly headed the Food and Drug Administration’s Office of Vaccines Research and Review, and who is now president of Biologics Consulting.

While there are factories around the world that can reliably produce generic Lipitor, vaccines like the ones from Pfizer and Moderna — using messenger RNA technology — require skilled expertise that even existing manufacturers are having trouble sourcing.

“In such a setting, imagining that someone will have staff who can create a new site or refurbish or reconfigure an existing site to make mRNA [vaccine] is highly, highly unlikely,” Yadav said.

#### Existing companies solve scale-up, but other companies don’t have the capabilities.

Lowe 21 [Derek; BA from Hendrix College and PhD in organic chemistry from Duke before spending time in Germany on a Humboldt Fellowship on his post-doc. He’s worked for several major pharmaceutical companies since 1989 on drug discovery projects against schizophrenia, Alzheimer’s, diabetes, osteoporosis and other diseases; 2/2/21; Myths of Vaccine Manufacturing; <https://www.science.org/content/blog-post/myths-vaccine-manufacturing>] Justin

Ah, but now we get back to Step Four. As Neubert says, "Welcome to the bottleneck!" Turning a mixture of mRNA and a set of lipids into a well-defined mix of solid nanoparticles with consistent mRNA encapsulation, well, that's the hard part. Moderna appears to be doing this step in-house, although details are scarce, and Pfizer/BioNTech seems to be doing this in Kalamazoo, MI and probably in Europe as well. Everyone is almost certainly having to use some sort of specially-built microfluidics device to get this to happen - I would be extremely surprised to find that it would be feasible without such technology. Microfluidics (a hot area of research for some years now) involves liquid flow through very small channels, allowing for precise mixing and timing on a very small scale. Liquids behave quite differently on that scale than they do when you pour them out of drums or pump them into reactors (which is what we're used to in more traditional drug manufacturing). That's the whole idea. My own guess as to what such a Vaccine Machine involves is a large number of very small reaction chambers, running in parallel, that have equally small and very precisely controlled flows of the mRNA and the various lipid components heading into them. You will have to control the flow rates, the concentrations, the temperature, and who knows what else, and you can be sure that the channel sizes and the size and shape of the mixing chambers are critical as well.

These will be special-purpose bespoke machines, and if you ask other drug companies if they have one sitting around, the answer will be "Of course not". This is not anything close to a traditional drug manufacturing process. And this is the single biggest reason why you cannot simply call up those "dozens" of other companies and ask them to shift their existing production over to making the mRNA vaccines. There are not dozens of companies who make DNA templates on the needed scale. There are definitely not dozens of companies who can make enough RNA. But most importantly, I believe that you can count on one hand the number of facilities who can make the critical lipid nanoparticles. That doesn't mean that you can't build more of the machines, but I would assume that Pfizer, BioNTech, Moderna (and CureVac as well) have largely taken up the production capacity for that sort of expansion as well.

And let's not forget: the rest of the drug industry is already mobilizing. Sanofi, one of the big vaccine players already (and one with their own interest in mRNA) has already announced that they're going to help out Pfizer and BioNTech. But look at the timelines: here's one of the largest, most well-prepared companies that could join in on a vaccine production effort, and they won't have an impact until August. It's not clear what stages Sanofi will be involved in, but bottling and packaging are definitely involved (and there are no details about whether LNP production is). And Novartis has announced a contract to use one of its Swiss location for fill-and-finish as well, with production by mid-year. Bayer is pitching in with CureVac's candidate.

### 1NC – Raw Material Turn

#### List of supply shortages – there is no way the aff solves, but they decrease available vaccines.

[Laurie Garrett 21, (Columnist at Foreign Policy and former senior fellow for global health at the Council on Foreign Relations). 5/7/21, Stopping Drug Patents Has Stopped Pandemics Before, Foreign Policy, <https://foreignpolicy.com/2021/05/07/stopping-drug-patents-pandemics-coronavirus-hiv-aids/>] Justin

The vaccines aren’t easy to make. Manufacturing errors in a Maryland Emergent BioSolutions factory caused an 86 percent plummet in Johnson & Johnson vaccine supplies in early April. Complex steps in the process of isolating, purifying, preserving, storing, and delivering COVID-19 immunizations are each error-prone and require long lists of specialized chemicals and machinery.

The world is in the grips now of pipette tips shortages—used to suck out chemicals and viral samples from test tubes in key steps of vaccine making. Syringes are in short supply, prompting vaccinators to toss vaccine supplies for lack of means to administer them. The sterile containers used to hold vaccines are running out. From the earliest days of the 2020 pandemic, the sorts of protective gear and machinery vaccine researchers and makers require have been in short supply, exacerbated by trade tensions between the United States and China. Swabs used for COVID-19 testing and all aspects of equipment cleaning in sterile conditions are held up in a grotesque family dispute in Maine. There aren’t enough centrifuge tubes made worldwide to spin down cell samples. Moderna and Pfizer are constantly scrambling to find the ingredients used to make the microscopic fatty balls, called liposomes, that house the mRNA molecules and carry them safely into the bloodstream. Even the nucleic acids used to construct mRNA and a long list of special enzymes used to purify those samples are in horribly short supply, largely because their use overlaps with the manufacture of COVID-19 tests. Because such delicate chemicals and proteins must be handled at deep-freeze temperatures and transported swiftly for immediate use, the entire supply chain is vulnerable to the simplest of catastrophes: weather at an airport, a car crash that blocks truck traffic, power outages, or competition for cargo space.

Although waiving TRIPS requirements on COVID-19 vaccines is a spectacular, historic gesture, would-be generic makers worldwide will soon discover their efforts are stymied not by patents but for want of Avanti Polar Lipids’ liposome ingredients, Flexsafe RM special bags to hold liquid vaccines in bulk, phosphate-buffered saline solution, Distearoylphosphatidylcholine for liposome-making, 5’ cap for mRNA made by TriLink BioTechnologies, RNA polymerases—the list goes on, and on, and on. As the number of would-be vaccine makers grows, so will demand for thousands of such items, putting pressure on companies that are, in many cases, mom-and-pop operations. Worse, pressure on supplies critical for COVID-19 vaccine making is already resulting in a production loss of vital medicines for other diseases.

#### Raw materials take years to scaleup.

Newey et al 21 [Sarah Newey*;* Anne Gulland*;* Jennifer Rigby, (GLOBAL HEALTH SECURITY CORRESPONDENTS at the telegraph) *and* Samaan Lateef (Reporting IN INDIA) 6/1/21, Vaccinating the world: the obstacles hindering global rollout – and how to overcome them, Telegraph, <https://www.telegraph.co.uk/global-health/science-and-disease/vaccinating-the-world/>] Justin

But perhaps the strongest argument against waivers is this: in October Moderna, one of the producers of new mRNA vaccines, actually offered an IP waiver. No-one has yet taken it up. Instead, “the biggest obstacle is raw materials,” says Dr Richard Torbett, chief executive of the Association of the British Pharmaceutical Industry. “All of the companies are saying we could produce more if we only had more glass vials, or filters, or bio bags.” Again, this is a daunting challenge – the Pfizer vaccine, for example, has 260 ingredients that come from 60 companies in 19 different countries. Many of these products are highly specialised and it will take many months, perhaps years, to ramp production of them up. “We’re very likely to see continued shortages that set back some of the vaccine producers for several months,” says Rasmus Bech Hansen, chief executive of Airfinity, adding that it is becoming harder for manufacturers with new jabs to secure the needed supplies – CureVac is already facing this problem, for example. The third challenge is perhaps harder to tackle. Vaccines are biological products and the manufacturing process does not always go smoothly. According to Airfinity, 1.73bn doses have been distributed worldwide, far short of the 4.5bn initially projected by big pharma. An overambitious manufacturing target is largely to blame for the gap. [AstraZeneca’s row with Europe](https://www.telegraph.co.uk/news/2021/05/09/eu-says-wont-renew-astrazeneca-contract-pivots-towards-pfizers/), for instance, was triggered by a lower yield at factories than hoped. Meanwhile Russia has produced only around 42m doses – compared to 400m from AstraZeneca and Pfizer – amid difficulties producing the second dose of Sputnik V, which uses different adenoviruses in the first and second shot.

#### The aff causes a scramble for limited resources by manufacturers with no experience – turns case.

Breuninger 21 [Kevin; Specialist at CNBC; “Pfizer CEO opposes U.S. call to waive Covid vaccine patents, cites manufacturing and safety issues,” CNBC; 5/7/21; <https://www.cnbc.com/2021/05/07/pfizer-ceo-biden-backed-covid-vaccine-patent-waiver-will-cause-problems.html>] Justin

“Currently, infrastructure is not the bottleneck for us manufacturing faster,” Bourla wrote in a dear colleague letter posted on LinkedIn. “The restriction is the scarcity of highly specialized raw materials needed to produce our vaccine.”

Pfizer’s vaccine requires 280 different materials and components that are sourced from 19 countries around the world, Bourla said. He contended that without patent protections, entities with much less experienced than Pfizer at manufacturing vaccines will start competing for the same ingredients.

“Right now, virtually every single gram of raw material produced is shipped immediately into our manufacturing facilities and is converted immediately and reliably to vaccines that are shipped immediately around the world,” Bourla wrote.

He predicted that the proposed waiver “threatens to disrupt the flow of raw materials.”

“It will unleash a scramble for the critical inputs we require in order to make a safe and effective vaccine,” Bourla wrote.

“Entities with little or no experience in manufacturing vaccines are likely to chase the very raw materials we require to scale our production, putting the safety and security of all at risk,” the CEO wrote.

#### Prevents distribution---causes vaccine hesitancy.

Newey et al 21 [Sarah Newey*;* Anne Gulland*;* Jennifer Rigby, (GLOBAL HEALTH SECURITY CORRESPONDENTS at the telegraph) *and* Samaan Lateef (Reporting IN INDIA) 6/1/21, Vaccinating the world: the obstacles hindering global rollout – and how to overcome them, Telegraph, <https://www.telegraph.co.uk/global-health/science-and-disease/vaccinating-the-world/>] Justin

[Vaccine hesitancy has also reared its head](https://www.telegraph.co.uk/global-health/science-and-disease/hesitancy-hard-wired-us-indulge-now-peril/), with concerns around rare blood clots linked to the AstraZeneca and J&J vaccines hitting public confidence in Africa. The Democratic Republic of Congo sent 1.3m unwanted doses to countries including Togo and Senegal before they expired in late June, while Malawi destroyed 20,000 unused shots last month as hesitancy hit rollout. “There were some assumptions in the public health community that this is such a bad pandemic... that this will change people’s minds if they were ever hesitant about vaccines,” Prof Heidi Larson, director of the Vaccine Confidence Project, told a Devex event. “Well, it hasn’t really – in fact, the groups and the questioning around vaccines and some of the anti sentiments have actually escalated.” There are also growing concerns that the AstraZeneca and J&J vaccines may be viewed as the “cheap relation” compared to the new mRNA vaccines produced by Pfizer and Moderna. Given the former make up the bulk of Covax’s supply and are far easier to distribute in the developing world, this is a substantial hurdle. “The AstraZeneca row has significantly impacted confidence – not just across Africa, but around the world,” says Dr Ayoade Alakija, co-chair of the Africa Union Vaccine Delivery Alliance. “But there is no choice here [to pick a different vaccine].” However, back in Kumasi, Mr Nyarko says it is supply rather than confidence that is currently undermining his district’s roll out. And with no clear picture on when more shots will arrive, he’s left with few options. “All we can do for now is pray that Ghana can secure another batch,” he says. “We are praying that the UK and Europe will help us.

### 1NC – Fraudulent Vaccines Turn

#### Reduced IP protections creates a rapid increase in faulty and fraudulent vaccines

Norquist 21 Grover Norquist (president of Americans for Tax Reform), 5/21/21, Biden is wrong to let other nations seize US intellectual property, The Hill, https://thehill.com/opinion/white-house/554629-biden-is-wrong-to-let-other-nations-seize-american-intellectual-property/SJKS

Upon taking office, Biden promised to hold China accountable. In a speech weeks after the inauguration, Biden [vowed](https://www.whitehouse.gov/briefing-room/speeches-remarks/2021/02/04/remarks-by-president-biden-on-americas-place-in-the-world/) to “push back on China’s attack on human rights, intellectual property and global governance.” To onlookers that day, Biden was promising to build on former [President Trump](https://thehill.com/people/donald-trump)’s [progress in holding China accountable](https://www.cnbc.com/2020/01/16/us-china-trade-deal-intellectual-property-protection-benefits-beijing.html). By backing the IP waiver, Biden will [ignore warnings](https://www.fbi.gov/news/pressrel/press-releases/peoples-republic-of-china-prc-targeting-of-covid-19-research-organizations) from the FBI that China was targeting COVID-19 research. China has long [pushed](https://www.tandfonline.com/doi/abs/10.1080/10192577.2016.1201261?journalCode=rplr20) to weaken global IP protections, known as TRIPS (Trade-Related Aspects of Intellectual Property Rights). Rather than surrendering on IP rights, the Biden administration should reduce protectionist trade restrictions imposed by other nations on COVID-19 products and encourage investments into vaccine manufacturing capacity that mirror Trump’s [Operation Warp Speed](https://public3.pagefreezer.com/browse/HHS%20%E2%80%93%C2%A0About%20News/20-01-2021T12:29/https:/www.hhs.gov/about/news/2020/05/15/trump-administration-announces-framework-and-leadership-for-operation-warp-speed.html). Seizing the trade secrets and IP of American COVID-19 manufacturers will do nothing to help fight the pandemic. Criminal syndicates all over the world have already [taken advantage](https://www.interpol.int/News-and-Events/News/2020/Global-operation-sees-a-rise-in-fake-medical-products-related-to-COVID-19) of the crisis to market fake COVID-19 tests, fake personal protective equipment and [fake vaccines](https://slate.com/technology/2021/05/counterfeit-covid-vaccines-mexico.html). Biden will make the problem worse. Foreign countries could see a flood of fraudulent vaccines from criminal organizations and from generic manufacturers that struggle to get the formula right. The case of [Emergent BioSolutions](https://www.nytimes.com/2021/03/31/us/politics/johnson-johnson-coronavirus-vaccine.html) — a Maryland-based manufacturer that contaminated 15 million doses of the Johnson and Johnson vaccine — shows that the manufacturing process is complex and requires extensive quality checks.