## 1

#### The meta-ethic is constructivism, or the idea that there is no a priori truth independent of human conceptual schemes.

#### Prefer:

#### [1] Rule-following paradox—innate moral rules can be interpreted in an infinite number of ways, ethics and religion proves. That means they can’t guide action since A) they aren’t binding B) they lead to contradictory interpertations.

#### [2] Epistemology—experience frames knowledge – the reason why a tree is a tree and not a rock is because we experience what a tree is and relate the word to the object.

#### Next, every time someone acts, they have a corresponding goal—that means action necessitates imposing meaning on the world. The state of nature necessitates infinite violence between conflicting world views:

#### [1] Arbitrariness—under the state of nature, people will impose their own goals on each other with no restrictions which justifies infinite violations of rights and makes meaning creation impossible.

#### [2] Resource Wars—a finite amount of material resources creates conflict between different people who want it which means we control the root cause of the aff.

#### There is no objective solution to this conflict because truth is relative. Instead, conflict requires the creation of the sovereign, to resolve disputes. In exchange for their safety, subjects agree to give up their claims to meaning to the sovereign.

Parrish 04 [Parrish, Rick, [Rick Parrish teaches at Loyola University New Orleans. His current research is focused on the play of violence and respect within justice.] "Derrida’S Economy Of Violence In Hobbes’ Social Contract" Theory &amp; Event, Vol. 7 No. 4, 2005, 2005, http://muse.jhu.edu/article/244119#back, DOA:6-30-2018 // WWBW]

All of the foregoing points to the conclusion that in the commonwealth **the sovereign's** first and **most fundamental job is to be the ultimate definer**. Several other commentators have also reached this conclusion. By way of elaborating upon the importance of the moderation of individuality in Hobbes' theory of government, Richard Flathman claims that peace "is possible only if the ambiguity and disagreement that pervade general thinking and acting are eliminated by the stipulations of a sovereign."57 Pursuant to debunking the perennial misinterpretation of Hobbes' mention of people as wolves, Paul Johnson argues that "**one of the primary functions of the sovereign** is to provide the necessary unity of meaning and reference for the primary terms in which men try to conduct their social lives."58 "The whole raison d'être of sovereign helmsmanship **lies** squarely **in the chronic defusing of interpretive clashes**,"59 **without which** **humans would** "fly off in all directions"60 and **fall inevitably into the violence of the natural condition.** 26. It is not surprising that so many noted students of Hobbes have reached this conclusion, given how prominently he himself makes this claim. According to Hobbes, "in the state of nature, where every man is his own judge, and differeth from others concerning the names and appellations of things, and from those differences arise quarrels and breach of peace, it was necessary there should be a common measure of all things, that might fall in controversy."61 The main categories of the sovereign's tasks are "to make and abrogate laws, to determine war and peace, [and] to know and judge of all controversies,"62 but each of these duties is a subspecies of its ultimate duty to be the sole and ultimate definer in matters of public importance. **It is only through the sovereign's effective continued accomplishment of this duty that the people of a commonwealth avoid the definitional problems that typify the state of nature.** 27. Judging controversies, which Hobbes lists as the third main task of the sovereign, is the duty most obviously about being the ultimate definer. In fact, Hobbes declares it a law of nature that "in every controversy, the parties thereto ought mutually to agree upon an arbitrator, whom they both trust; and mutually to covenant to stand to the sentence he shall give therein."63 As I repeatedly alluded to above, this agreement to abide by the decision of a third party arbitrator, **a sovereign** in the commonwealth, **is necessary because of the fundamentally perspectival and relative nature of persons' imputations of meaning and value into the situations they construct.** Hobbes understands this problem, as evidenced by his claim that "seeing right reason is not existent, the reason of some man or men must supply the place thereof; and that man or men, is he or they, that have the sovereign power"64 to dictate meanings that will be followed by all. The sovereign is even protected from potential democratic impulses, by which a 'true' meaning would be that agreed upon by the greatest number of people. Because "no one man's reason, nor the reason of any one number of men, makes the certainty," they will still "come to blows . . . for want of a right reason constituted by nature"65 unless both the majority and the minority agree to abide by the meanings promulgated by the sovereign. 28. These meanings are usually created and promulgated by the sovereign in the form of laws, another of the tasks with which Hobbes charges it. In one of his clearest explanations of the law, Hobbes writes that "it belongs to the same chief power to make some common rules for all men, and to declare them publicly, by which every man may know what may be called his, what another's, what just, what unjust, what ho nest, what dishonest, what good, what evil; that is summarily, what is to be done, what to be avoided in our common course of life."66 The civil law is the set of the sovereign's definitions for ownership, justice, good, evil, and all other concepts that are important for the maintenance of peace in the commonwealth. When everyone follows the law (that is, when everyone follows the sovereign's definitions) there are far fewer conflicts among persons because everyone appeals to the same meanings. This means that people know what meanings others will use to evaluate the actions of themselves and others, so the state of nature's security dilemmas and attempts to force one's own meanings upon others are overcome. 29. **There is to be no question of the truth or falsity of the sovereign's definitions because "there are no authentical doctrines concerning right and wrong**, good and evil, **besides the constituted laws in each realm and government."**67 In fact, Hobbes specifically says that one of the "diseases of a commonwealth" is that "every private man is judge of good and evil actions."68 **Only when individual persons agree to follow the meanings promulgated by the sovereign, which of course includes refraining from trying to impose their own meanings on others, can persons live together in peace -- when they take it upon themselves to impose meaning on situations of public import, they descend into violence again.**

#### Thus, the standard is consistency with the will of the sovereign.

#### Now Negate --

#### 1] Uniqueness proves the sovereign wants IP, that means the plan would be an act of coercion that goes against the soveriegns will.

#### 2] IP rights are implicit in the creation of the sovereign in expressing creativity.

Ghosh 04 [Shubha Ghosh (B.A., Amherst College; Ph.D., University of Michigan; J.D., Stanford Law School; Professor of Law, University at Buffalo, SUNY, Law School; Visiting Professor, SMU Dedman School of Law). “PATENTS AND THE REGULATORY STATE: RETHINKING THE PATENT BARGAIN METAPHOR AFTER ELDRED”. BERKELEY TECHNOLOGY LAW JOURNAL. 2004. Accessed 9/3/21. <https://lawcat.berkeley.edu/record/1119327/files/fulltext.pdf> //Xu]

As illustration of the limits of social contract theory,46 particularly the malleability of the notions of consent and promise, consider a social contract theory of intellectual property based on the thoughts of Thomas Hobbes rather than that of John Locke. No scholar has expressly developed a Hobbesian theory of patent or of copyright, but as a challenge to social contract theory, it may be useful to imagine what such a theory would look like.47 For Hobbes, humans created the leviathan-the sovereign state-to protect themselves from each other in the state of nature. 48 Without the leviathan, the state of nature was not an idyllic paradise but a condition of savagery and brutality. In the state of nature, to the extent that any creative activity occurred, the objects of creation would be cannibalized, thoughtlessly copied, adapted, distributed, and performed or used, sold, offered to sell, and made by others. Thus, intellectual property law under the leviathan would protect individuals from this state of nature by making them absolute, immutable, bountiful, and unlimited. Humans would consent to these terms if they were enforced equally for all creations, and each author and inventor would promise to all others to abide by this form of the intellectual property social contract.

## 2

#### US dominates biotech now but reducing IPP cedes control to China, Paulsen 7-9

Erik Paulsen, 7-9-2021, "ERIK PAULSEN: We can save the world with our vaccines — without surrendering our IP to China," Bakersfield Californian, <https://www.bakersfield.com/opinion/erik-paulsen-we-can-save-the-world-with-our-vaccines-without-surrendering-our-ip-to/article_b0b87692-df61-11eb-9a13-d7fa02eefaee.html> AT

The Biden administration gave Beijing a gift when it endorsed a petition before the World Trade Organization to force the American developers of COVID-19 vaccines and therapeutics to relinquish their intellectual property rights to these medicines. The Chinese government seeks to take over in biotech, a sector where U.S. innovators lead. Biotech is included in its "Made in China 2025" plan, which lists 10 sectors that China aims to dominate. The government intends to force anyone doing business in China in those spheres to hand over know-how. Surrendering IP protections on biomedical technology has dire consequences. Foremost, it guts the foundation of biomedical innovation, which takes huge investments spanning many years to bear fruit. IP protections assure innovators that they can recover those investments and make a profit. Losing IP protection would have a chilling effect on investments in the sector. Equally injurious to America, the IP waiver would allow China to become a biotech powerhouse by piggybacking on American innovation. A waiver on IP for COVID-19 vaccines would accelerate the timeline for "Made in China 2025." The mRNA technology which undergirds the Pfizer-BioNTech and Moderna vaccines has uses beyond this pandemic. It has the potential to take on cancers and other diseases. With the waiver, China and others will be emboldened to use the once-proprietary mRNA know-how for broader research and applications. Is this in America's interest? Mark Cohen, an expert on Chinese IP theft, recently told the Washington Post that the waiver would deliver "a competitive advantage to countries that are increasingly viewed as our adversaries, at taxpayer expense." Beyond the damage that an mRNA giveaway will inflict on US R&D investments, the waiver sends a signal that America could agree to force American innovators to part with trade secrets every time there's a global crisis. That attitude will arrest biopharmaceutical innovation. Small biotech firms spearhead 70% of the R&D pipeline, relying heavily on private investors to fund that work. If investors know that innovators may have to give away their discoveries in a global crisis, they'll deploy their money elsewhere. That’ll make it even harder to draw the R&D investments needed to address infectious diseases, including drug-resistant infections and viruses. America is benefiting greatly from the early access to COVID-19 treatments and vaccines, saving lives and speeding economic recovery. Preserving U.S. leadership in biomedical innovation includes preserving the incentives that helped make it the world’s leader. A final downside of the waiver is the ability for American firms to find a cure for the next pandemic. Among the greatest threats is bacteria resistant to our current arsenal of antibiotics that becomes a pandemic-inducing superbug. Already, the market for new antimicrobials is broken. Only a handful of biotechs have them in development, and many have gone bankrupt trying to commercialize one. "A lot of people have rightly said we need to start thinking about preparing for the next pandemic now," noted Craig Garthwaite, a healthcare-business professor at Northwestern University. "Suspending IP for vaccine manufacturers would send exactly the wrong signal for the future." For the sake of patients everywhere, American IP rights must stay protected. It's the only way to keep China at bay and American innovators at work.

#### Biotech leadership key to future military primacy.

Moore 21 [(Scott Moore is a political scientist and administrator at the University of Pennsylvania and the author of a forthcoming book, “How China Shapes the Future,” on China’s role in public goods and emerging technologies.) 8-8-2021, "In Biotech, the Industry of the Future, the U.S. Is Way Ahead of China," Lawfare, https://www.lawfareblog.com/biotech-industry-future-us-way-ahead-china]//Lex AKu

A [continuing refrain](https://phys.org/news/2020-10-america-edge-peril.html) from Washington in recent years has been that the United States is falling behind China in the development of critical emerging technologies. In some fields, this may be true. But not in biotechnology. To be sure, China’s biotech sector is growing at a torrid pace, and some of its firms are becoming leaders in [certain areas](https://www.brookings.edu/wp-content/uploads/2020/04/FP_20200427_china_biotechnology_moore.pdf), such as cancer treatment. Yet the U.S. retains a dominant position in research, development and commercialization, accounting for [almost half](https://itif.org/publications/2018/03/26/how-ensure-americas-life-sciences-sector-remains-globally-competitive) of all biotech patents filed from 1999 to 2013. The triumph of its biotechnology industry during the coronavirus pandemic, producing two highly effective vaccines using an entirely new approach based on [messenger RNA](https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/mrna.html), and in record time, shows that the U.S.’s competitive edge in biotechnology remains largely intact. And that has important implications as Washington gears up for a sustained period of geopolitical competition with Beijing. Biotech is such a critical area for technological competition between the U.S. and China because it is transforming fields from medicine to military power. The great advances of the 19th century, like chemical fertilizers, resulted from mastering chemistry. In the 20th century, mastery of physics led to nuclear energy—and, more ominously, nuclear weapons. In the 21st century, biology offers a similar mix of peril and promise. This was illustrated dramatically by the award of the 2020 Nobel Prize for the discovery of an enzyme system known as CRISPR-Cas9, which allows an organism’s genomes to be edited with high precision. It is a transformational breakthrough. But while CRISPR shows great promise in the development of [new cures](https://www.nature.com/articles/d41586-020-03476-x) for long-untreatable diseases, it could also lead to a whole new generation of [deadly bioweapons](https://foreignpolicy.com/2019/11/08/cloning-crispr-he-jiankui-china-biotech-boom-could-transform-lives-destroy-them/). That’s a prospect that increasingly alarms U.S. intelligence officials. In 2016, then-Director of National Intelligence James Clapper [warned Congress](https://www.technologyreview.com/s/600774/top-us-intelligence-official-calls-gene-editing-a-wmd-threat/) that “[r]esearch in genome editing conducted by countries with different regulatory or ethical standards than those of western countries probably increases the risk of the creation of potentially harmful biological agents or products.” Although Clapper didn’t name specific countries, it soon became clear that he was referring mainly to China. Four years later, his successor, John Ratcliffe, issued a far more [pointed warning](https://www.wsj.com/articles/china-is-national-security-threat-no-1-11607019599) that “China has even conducted human testing on members of the People’s Liberation Army in hope of developing soldiers with biologically enhanced capabilities. There are no ethical boundaries to Beijing’s pursuit of power.” Such capabilities are almost certainly only speculative—but they underscore why biotech leadership is so important for national security as well as economic competitiveness. Beijing has long envied the United States’s dominant position in biotechnology and spent heavily to overtake it. Biotech has been a priority sector for state investment since the 1980s, and by [one estimate](https://www.brookings.edu/wp-content/uploads/2020/04/FP_20200427_china_biotechnology_moore.pdf) Beijing had poured some $100 billion into the sector by 2018. Nowhere did it lavish more attention or invest more of its propaganda power than in developing a coronavirus vaccine. State media have spent months [crowing](https://www.globaltimes.cn/content/1190615.shtml) that “China is working around the clock for breakthroughs in COVID-19 vaccines.” Yet despite this push, China’s vaccine program quickly took on a Potemkin air. In February 2020, barely two months after the onset of the pandemic and after a supposedly crash vaccine effort, a military doctor stood in front of a Chinese flag to receive what was billed as an experimental vaccine dose but was widely suspected to be a [staged photo op](https://www.sciencemag.org/news/2020/11/global-push-covid-19-vaccines-china-aims-win-friends-and-cut-deals). Now, having [spent months](https://www.nytimes.com/2021/01/13/business/chinese-vaccine-brazil-sinovac.html) talking up its two primary vaccine candidates to developing countries like Brazil and Indonesia, both of which have entered into purchase agreements with Chinese biotech firms, Chinese officials face [severe mistrust](https://www.nytimes.com/2021/01/13/business/chinese-vaccine-brazil-sinovac.html) among their nation’s overseas partners. For China’s leaders, the disappointing returns on their big bet on biotechnology look likely to cause them more headaches at home as well as abroad—there are [already signs](https://www.sciencemag.org/news/2020/11/global-push-covid-19-vaccines-china-aims-win-friends-and-cut-deals) that affluent Chinese place more trust in foreign-developed coronavirus vaccines than the homegrown ones produced at such great expense. For U.S. officials, though, China’s relative underperformance in vaccine development presents an opportunity to reassert the United States’s leadership in biotechnology and public health and bolster the nation’s depleted soft power in the process. The Biden administration has already signaled it will reengage in multilateral bodies such as the World Health Organization. Yet the U.S. shouldn’t stop there. Washington should begin thinking now about how to emulate the success of the President’s Emergency Plan for AIDS Relief (PEPFAR)—which, though imperfect, is widely regarded as one of the most successful single public health interventions in history—to address growing disparities in access to coronavirus vaccines between countries. At the moment, vaccine supplies are controlled largely by rich countries, creating the risk of moral and public health failure if the gap persists. While COVID-19, the respiratory disease caused by the novel coronavirus, differs in many respects from AIDS, PEPFAR combined research, prevention, and access to therapeutics. Developing a comparable institutional structure to close the coronavirus vaccine access gap is the right thing to do—but it would also go a long way to restoring America’s battered global reputation. At the same time, the United States can’t afford to rest on its laurels in biotechnology, or any other field. Aside from China, other nations like Singapore and Israel have also invested heavily to develop their biotechnology sectors, with Israel in particular giving rise to a thriving biotech industry. U.S. public investment in basic scientific research and development has meanwhile [been on the decline](https://www.wsj.com/articles/how-the-u-s-surrendered-to-china-on-scientific-research-11555666200) for decades, and there are worrying signs that America’s once world-beating innovation ecosystem is less productive, and less entrepreneurial, than it once was. Despite strengths in translational research, moreover, the frontiers of biology increasingly sit at the [intersection with other disciplines](https://www.startus-insights.com/innovators-guide/biotech-innovation-map-reveals-emerging-technologies-startups/) like computer science, meaning that funding agencies, universities and other organizations need to break down disciplinary silos. Boosting support for biotechnology research, while reforming how that money is used, will go a long way toward shoring up the United States’s leading position in the global biotech sector. The U.S. biotechnology sector also faces other threats, not least growing espionage and intellectual property theft by foreign actors, especially those linked to China. Several high-profile cases brought by the U.S. Department of Justice’s China Initiative have involved biotechnology researchers, and American biotech firms have been [top targets](https://www.jdsupra.com/legalnews/chinese-and-russian-hackers-targeting-78355/) for cyber theft and intrusion. Sustained outreach to researchers and research institutions is critical to preventing such theft. But efforts to clamp down on the threats posed by espionage and intellectual property theft can easily go too far and must preserve the researcher mobility and data-sharing that is essential to doing cutting-edge science. Beyond its shores, the United States should work with its partners and allies to enhance export controls on dual-use biotechnology—used for both peaceful and military gain—especially DNA templates. Many forms of genetic material and synthetic biology products are [already subject](https://www.bis.doc.gov/index.php/documents/regulations-docs/2332-category-1-materials-chemicals-microorganisms-and-toxins-4/file) to U.S. export controls, but gaps remain, and screening for genetic sequence orders relies primarily on voluntary regulation by biotech firms. Better coordinating export controls among major economies and U.S. allies can dramatically reduce the risk of sophisticated bioweapons development in the decades to come.

#### American primacy solves every threat – collapse causes emboldenment and miscalc

Brands 18, Hal. American grand strategy in the age of Trump. Brookings Institution Press, 2018. “Chapter 6: Does America Have Enough Hard Power?” (Henry A. Kissinger Distinguished Professor of Global Affairs at the Johns Hopkins University School of Advanced International Studies, Senior Fellow at the Center for Strategic and Budgetary Assessments and the Foreign Policy Research Institute, Ph.D. in history from Yale University)//Elmer

Much contemporary commentary favors the first option—reducing commitments—and denounces the third as financially ruinous and perhaps impossible.5 Yet significantly expanding American capabilities would not be nearly as economically onerous as it may seem. Compared to the alternatives, in fact, this approach represents the best option for sustaining American primacy and preventing a slide into strategic bankruptcy that will eventually be punished. Since World War II, the United States has had a military second to none. Since the Cold War, America has committed to having overwhelming military primacy. The idea, as George W. Bush declared in 2002, that America must possess “strengths beyond challenge” has featured in every major U.S. strategy document for a quarter century; it has also been reflected in concrete terms.6 From the early 1990s, for example, the United States consistently accounted for around 35 to 45 percent of world defense spending and maintained peerless global power-projection capabilities.7 Perhaps more important, U.S. primacy was also unrivaled in key overseas strategic regions—Europe, East Asia, the Middle East. From thrashing Saddam Hussein’s million-man Iraqi military during Operation Desert Storm, to deploying—with impunity—two carrier strike groups off Taiwan during the China-Taiwan crisis of 1995– 96, Washington has been able to project military power superior to anything a regional rival could employ even on its own geopolitical doorstep. This military dominance has constituted the hard-power backbone of an ambitious global strategy. After the Cold War, U.S. policymakers committed to averting a return to the unstable multipolarity of earlier eras, and to perpetuating the more favorable unipolar order. They committed to building on the successes of the postwar era by further advancing liberal political values and an open international economy, and to suppressing international scourges such as rogue states, nuclear proliferation, and catastrophic terrorism. And because they recognized that military force remained the ultima ratio regum, they understood the centrality of military preponderance. Washington would need the military power necessary to underwrite worldwide alliance commitments. It would have to preserve substantial overmatch versus any potential great-power rival. It must be able to answer the sharpest challenges to the international system, such as Saddam’s invasion of Kuwait in 1990 or jihadist extremism after 9/11. Finally, because prevailing global norms generally reflect hard-power realities, America would need the superiority to assure that its own values remained ascendant. It was impolitic to say that U.S. strategy and the international order required “strengths beyond challenge,” but it was not at all inaccurate. American primacy, moreover, was eminently affordable. At the height of the Cold War, the United States spent over 12 percent of GDP on defense. Since the mid-1990s, the number has usually been between 3 and 4 percent.8 In a historically favorable international environment, Washington could enjoy primacy—and its geopolitical fruits—on the cheap. Yet U.S. strategy also heeded, at least until recently, the fact that there was a limit to how cheaply that primacy could be had. The American military did shrink significantly during the 1990s, but U.S. officials understood that if Washington cut back too far, its primacy would erode to a point where it ceased to deliver its geopolitical benefits. Alliances would lose credibility; the stability of key regions would be eroded; rivals would be emboldened; international crises would go unaddressed. American primacy was thus like a reasonably priced insurance policy. It required nontrivial expenditures, but protected against far costlier outcomes.9 Washington paid its insurance premiums for two decades after the Cold War. But more recently American primacy and strategic solvency have been imperiled. THE DARKENING HORIZON For most of the post–Cold War era, the international system was— by historical standards—remarkably benign. Dangers existed, and as the terrorist attacks of September 11, 2001, demonstrated, they could manifest with horrific effect. But for two decades after the Soviet collapse, the world was characterized by remarkably low levels of great-power competition, high levels of security in key theaters such as Europe and East Asia, and the comparative weakness of those “rogue” actors—Iran, Iraq, North Korea, al-Qaeda—who most aggressively challenged American power. During the 1990s, some observers even spoke of a “strategic pause,” the idea being that the end of the Cold War had afforded the United States a respite from normal levels of geopolitical danger and competition. Now, however, the strategic horizon is darkening, due to four factors. First, great-power military competition is back. The world’s two leading authoritarian powers—China and Russia—are seeking regional hegemony, contesting global norms such as nonaggression and freedom of navigation, and developing the military punch to underwrite these ambitions. Notwithstanding severe economic and demographic problems, Russia has conducted a major military modernization emphasizing nuclear weapons, high-end conventional capabilities, and rapid-deployment and special operations forces— and utilized many of these capabilities in conflicts in Ukraine and Syria.10 China, meanwhile, has carried out a buildup of historic proportions, with constant-dollar defense outlays rising from US$26 billion in 1995 to US$226 billion in 2016.11 Ominously, these expenditures have funded development of power-projection and antiaccess/area denial (A2/AD) tools necessary to threaten China’s neighbors and complicate U.S. intervention on their behalf. Washington has grown accustomed to having a generational military lead; Russian and Chinese modernization efforts are now creating a far more competitive environment. Second, the international outlaws are no longer so weak. North Korea’s conventional forces have atrophied, but it has amassed a growing nuclear arsenal and is developing an intercontinental delivery capability that will soon allow it to threaten not just America’s regional allies but also the continental United States.12 Iran remains a nuclear threshold state, one that continues to develop ballistic missiles and A2/AD capabilities while employing sectarian and proxy forces across the Middle East. The Islamic State, for its part, is headed for defeat, but has displayed military capabilities unprecedented for any terrorist group, and shown that counterterrorism will continue to place significant operational demands on U.S. forces whether in this context or in others. Rogue actors have long preoccupied American planners, but the rogues are now more capable than at any time in decades. Third, the democratization of technology has allowed more actors to contest American superiority in dangerous ways. The spread of antisatellite and cyberwarfare capabilities; the proliferation of man-portable air defense systems and ballistic missiles; the increasing availability of key elements of the precision-strike complex— these phenomena have had a military leveling effect by giving weaker actors capabilities which were formerly unique to technologically advanced states. As such technologies “proliferate worldwide,” Air Force Chief of Staff General David Goldfein commented in 2016, “the technology and capability gaps between America and our adversaries are closing dangerously fast.”13 Indeed, as these capabilities spread, fourth-generation systems (such as F-15s and F-16s) may provide decreasing utility against even non-great-power competitors, and far more fifth-generation capabilities may be needed to perpetuate American overmatch. Finally, the number of challenges has multiplied. During the 1990s and early 2000s, Washington faced rogue states and jihadist extremism—but not intense great-power rivalry. America faced conflicts in the Middle East—but East Asia and Europe were comparatively secure. Now, the old threats still exist—but the more permissive conditions have vanished. The United States confronts rogue states, lethal jihadist organizations, and great-power competition; there are severe challenges in all three Eurasian theaters. “I don’t recall a time when we have been confronted with a more diverse array of threats, whether it’s the nation state threats posed by Russia and China and particularly their substantial nuclear capabilities, or non-nation states of the likes of ISIL, Al Qaida, etc.,” Director of National Intelligence James Clapper commented in 2016. Trends in the strategic landscape constituted a veritable “litany of doom.”14 The United States thus faces not just more significant, but also more numerous, challenges to its military dominance than it has for at least a quarter century.

## 3

#### Drug innovation is high—Prefer our study it’s analyzes the past decade and is from one of the most trusted leaders in innovation information, Clarivate 9-15

[[Clarivate Plc](https://c212.net/c/link/?t=0&l=en&o=3290353-1&h=1934425780&u=https%3A%2F%2Fc212.net%2Fc%2Flink%2F%3Ft%3D0%26l%3Den%26o%3D2991820-1%26h%3D1150240617%26u%3Dhttp%253A%252F%252Fwww.clarivate.com%252F%26a%3DClarivate%2BPlc&a=Clarivate+Plc), (NYSE:[CLVT](https://www.prnewswire.com/news-releases/2021-centre-for-medicines-research-cmr-pharmaceutical-rd-factbook-from-clarivate-finds-drug-approvals-at-a-10-year-high-despite-the-challenges-of-covid-19-301376948.html#financial-modal)), a global leader in providing trusted information and insights to accelerate the pace of innovation, today announced the release of the [2021 Centre for Medicines Research (CMR) International Pharmaceutical R&D Factbook](https://c212.net/c/link/?t=0&l=en&o=3290353-1&h=2854804820&u=https%3A%2F%2Fclarivate.com%2Finnovation-exchange%2Fsolution%2Fcmr-international-pharmaceutical-rd-factbook%2F%3Fcampaignname%3DCMR_RD_Factbook_Ecommerce_LS_Global_2021%26campaignid%3D7014N000001YTVM%26utm_campaign%3DCMR_RD_Factbook_Ecommerce_LS_Global_2021%26utm_source%3Dearned_coverage%26utm_medium%3Dpress&a=2021+Centre+for+Medicines+Research%C2%A0(CMR)+International+Pharmaceutical+R%26D+Factbook)., 9-15-2021, "2021 Centre for Medicines Research (CMR) Pharmaceutical R&amp;D Factbook from Clarivate Finds Drug Approvals at a 10-year High Despite the Challenges of COVID-19", No Publication, https://www.prnewswire.com/news-releases/2021-centre-for-medicines-research-cmr-pharmaceutical-rd-factbook-from-clarivate-finds-drug-approvals-at-a-10-year-high-despite-the-challenges-of-covid-19-301376948.html, date accessed 9-15-2021] //Lex AT

COVID impact1 Amid a global pandemic as the world has shone a spotlight on the industry's COVID-19 vaccine and therapeutic development race, biopharma companies have been anxious to see how COVID-19 could impact R&D. From the CMR Factbook we can infer that there has been no major impact from COVID-19 on the R&D pipeline thus far. While it typically takes a drug two to three years to transition through a clinical phase, the longer-term impact remains to be seen. 2020 saw a 10-year high for NME launches indicating that COVID-19 did not negatively impact drug R&D. There were 59 NMEs launched in 2020 as compared to 31 in 2011 and 46 in 2019. The pandemic did not impact drug development times as they have stayed relatively constant from 2019 to 2020 at 10.5 and 10.4 years respectively. Approval times for FDA, EMA, and PMDA remained stable despite the pandemic: The FDA took on average 244 days in 2020 as compared to 243 in 2019. The EMA took on average 426 days in 2020 as compared to 423 in 2019. The PDMA took on average 313 days in 2020 as compared to 304 in 2019. Industry innovation2 In addition to pandemic-related impacts, now more than ever, biopharma companies are focused on truly innovative and differentiated therapies. According to 2020 FDA approvals, 58% were for rare indications while 68% were granted at least one regulatory designation: breakthrough, fast-track, accelerated, or priority. Both these points put together suggest that biopharma is increasingly focusing on innovative and differentiated therapies. TNF alpha ligand was the most popular target in 2020 with 69 companies actively researching the area. 3 These innovative therapies are mainly being researched by emerging biopharma companies rather than top 30 innovators. Of the 69 companies researching the TNF alpha ligand, only three of them are top 30 innovators. 4

#### IP protections encourage innovation in pandemics. McDole and Ezell 21

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In the fight against COVID‑19, there are two main types of diagnostic tests: molecu‑ lar and antigen.94 According to the U.S. FDA, molecular tests detect an active virus’s genetic material and provide more accurate results, while antigen tests provide faster re‑ sults and detect specific proteins from an active virus.95 As of December 21, 2020, there were 469 COVID‑19 diagnostic innovations in various stages of development around the world, two of which were fully‑approved for general use and 203 were authorized for emergency use.96 One such innovation was developed by LumiraDx, a point‑of‑care diagnostic and health care information technology company based in the United King‑ dom. The LumiraDx SARS‑CoV‑2 Ag Test is an antigen diagnostic test used in conjunc‑ tion with the LumiraDx Instrument and Platform to quickly provide highly accurate results.97 Like most COVID‑19 diagnostic tests, the LumiraDX SARS‑CoV‑2 Ag Test starts with collecting a specimen using a nasal swab. In prepping the specimen, the test uses microfluidic immunofluorescence to determine whether a COVID‑19 nucleocapsid protein antigen is present in the specimen. A test strip with the prepped specimen is inserted into the LumiraDx Instrument, and results are reported to the LumiraDx Plat‑ form within 12 minutes.98 In clinical trials, within the first 12 days of symptom onset, the tests produced the same results as molecular tests 97.6 percent of the time for positive results and 96.6 percent of the time for negative results.99 For tests conducted within the first three days of symptom onset, the results were 100 percent aligned.100 Subsequent independent tests have shown similar results.101 In August 2020, the FDA granted the company EUA for the LumiraDx SARS‑CoV‑2 Ag Test, and as of January 21, 2021, the test is available in more than 30 countries including Japan, Brazil, and Switzerland.102 In November 2020, LumiraDx partnered with numerous organizations—including the Africa Centres for Disease Control and Prevention, the Bill and Melinda Gates Founda‑ tion, and the COVID‑19 Therapeutics Accelerator—to provide 55 African Union mem‑ ber states with portable diagnostic instruments and related COVID‑19 antigen tests. For innovative companies such as LumiraDx, the importance of IP cannot be understated. As Sir John Bell and his colleagues stated, the life‑sciences sector fundamentally survives on IP.103 LumiraDx holds 22 patents associated with the company’s platform, diagnos‑ tic assays, and smart connectivity, covering nine different jurisdictions. According to the 2020 U.S. Chamber International IP Index, the United Kingdom ranks second out of 53 countries in terms of IP system effectiveness.104 Key factors weakening the country’s IP, as noted in the U.S. Chamber’s report, include uncertainties surrounding Brexit and the United Kingdom’s adherence to European Commission policies concerning patent term restoration for biopharmaceuticals. The GII 2020 ranks the United Kingdom third in Europe and fourth overall worldwide in innovation policies. Also, the GII 2020 ranks the United Kingdom sixth out of 49 high‑income economies for quality of innovation. Given the country’s sustained success in innovation, and for the sake of patients and innovators alike, the United Kingdom must ensure that robust IP systems remain and improve throughout the future.105 Due to government restrictions and market access barriers, UK patients often lack access to the latest medical innovations.106 These poli‑ cies and restrictions must be reviewed and addressed in a more market‑friendly man‑ ner moving forward. As the country settles into this new era, policymakers should also ensure strong IP provisions are included in all trade agreements.107 Continued consis‑ tency between the UK and European Union systems will ensure certainty and continuity for innovative businesses such as LumiraDx. UK policymakers should also adopt and implement the proposed policy changes set forth in Sir John Bell’s 2017 Life Sciences Industrial Strategy report.108 If policymakers in the United Kingdom maintain provid‑ ing robust IP systems for their innovators, they will continue to be among the world’s innovation leaders. When these provisions are in place and implemented properly, citi‑ zens of the United Kingdom—and the world—will continue to benefit from innovations such as the LumiraDx SARS‑CoV‑2 Ag Test.

#### Pharma innovation solves disease – that prevents extinction

Engelhardt 8 – PhD, MD, Professor of Philosophy @ Rice (Hugo, “Innovation and the Pharmaceutical Industry: Critical Reflections on the Virtues of Profit,” EBrary)

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.