# 1NC vs. Plano East NG

### 1NC – Off

**The standard is maximizing expected wellbeing**

**First, pleasure and pain are intrinsically valuable. People consistently regard pleasure and pain as good reasons for action, despite the fact that pleasure doesn’t seem to be instrumentally valuable for anything.**

**Moen 16** [Ole Martin Moen, Research Fellow in Philosophy at University of Oslo “An Argument for Hedonism” Journal of Value Inquiry (Springer), 50 (2) 2016: 267–281] SJDI

Let us start by observing, empirically, that a widely shared judgment about intrinsic value and disvalue is that pleasure is intrinsically valuable and pain is intrinsically disvaluable. On virtually any proposed list of intrinsic values and disvalues (we will look at some of them below), pleasure is included among the intrinsic values and pain among the intrinsic disvalues**.** This inclusion makes intuitive sense, moreover, for there is something undeniably good about the way pleasure feels and something undeniably bad about the way pain feels, and neither the goodness of pleasure nor the badness of pain seems to be exhausted by the further effects that these experiences might have. “Pleasure” and “pain” are here understood inclusively, as encompassing anything hedonically positive and anything hedonically negative.2 The special value statuses of pleasure and pain are manifested in how we treat these experiences in our everyday reasoning about values**.** If you tell me that you are heading for the convenience store, I might ask: “What for?” This is a reasonable question, for when you go to the convenience store you usually do so, not merely for the sake of going to the convenience store, but for the sake of achieving something further that you deem to be valuable**.** You might answer, for example: “To buy soda.” This answer makes sense, for soda is a nice thing and you can get it at the convenience store. I might further inquire, however: “What is buying the soda good for?” This further question can also be a reasonable one, for it need not be obvious why you want the soda. You might answer: “Well, I want it for the pleasure of drinking it.” If I then proceed by asking “But what is the pleasure of drinking the soda good for?” the discussion is likely to reach an awkward end. The reason is that the pleasure is not good for anything further; it is simply that for which going to the convenience store and buying the soda is good.3 As Aristotle observes**:** “We never ask [a man] what his end is in being pleased, because we assume that pleasure is choice worthy in itself.”4 Presumably, a similar story can be told in the case of pains, for if someone says “This is painful!” we never respond by asking: “And why is that a problem?” We take for granted that if something is painful, we have a sufficient explanation of why it is bad. If we are onto something in our everyday reasoning about values, it seems that pleasure and pain are both places where we reach the end of the line in matters of value.

**Moreover, *only* pleasure and pain are intrinsically valuable. All other values can be explained with reference to pleasure; Occam’s razor requires us to treat these as instrumentally valuable.**

**Moen 16** [Ole Martin Moen, Research Fellow in Philosophy at University of Oslo “An Argument for Hedonism” Journal of Value Inquiry (Springer), 50 (2) 2016: 267–281] SJDI

I think several things should be said in response to Moore’s challenge to hedonists. First, **I do not think the burden of proof lies on hedonists to explain why the additional values are not intrinsic values. If someone claims that X is intrinsically valuable, this is a substantive, positive claim, and it lies on him or her to explain why we should believe that X is in fact intrinsically valuable.** Possibly, this could be done through thought experiments analogous to those employed in the previous section. Second, **there is something peculiar about the list of additional intrinsic values** that counts in hedonism’s favor**: the listed values have a strong tendency to be well explained as things that help promote pleasure and avert pain.** To go through Frankena’s list, life and consciousness are necessary presuppositions for pleasure; activity, health, and strength bring about pleasure; and happiness, beatitude, and contentment are regarded by Frankena himself as “pleasures and satisfactions.” The same is arguably true of beauty, harmony, and “proportion in objects contemplated,” and also of affection, friendship, harmony, and proportion in life, experiences of achievement, adventure and novelty, self-expression, good reputation, honor and esteem. Other things on Frankena’s list, such as understanding, **wisdom, freedom, peace, and security, although they are perhaps not themselves pleasurable, are important means to achieve a happy life, and as such, they are things that hedonists would value highly.** **Morally good dispositions and virtues, cooperation, and just distribution of goods and evils, moreover, are things that, on a collective level, contribute a happy society, and thus the traits that would be promoted and cultivated if this were something sought after.** To a very large extent, the intrinsic values suggested by pluralists tend to be hedonic instrumental values. Indeed, pluralists’ suggested intrinsic values all point toward pleasure, for while the other values are reasonably explainable as a means toward pleasure, pleasure itself is not reasonably explainable as a means toward the other values. Some have noticed this. Moore himself, for example, writes that though his pluralistic theory of intrinsic value is opposed to hedonism, its application would, in practice, look very much like hedonism’s: “Hedonists,” he writes “do, in general, recommend a course of conduct which is very similar to that which I should recommend.”24 Ross writes that “[i]t is quite certain that by promoting virtue and knowledge we shall inevitably produce much more pleasant consciousness. These are, by general agreement, among the surest sources of happiness for their possessors.”25 Roger Crisp observes that “those goods cited by non-hedonists are goods we often, indeed usually, enjoy.”26 What Moore and Ross do not seem to notice is that their observations give rise to two reasons to reject pluralism and endorse hedonism. The first reason is that if **the suggested non-hedonic intrinsic values are potentially explainable by appeal to just pleasure and pain** (which, following my argument in the previous chapter, we should accept as intrinsically valuable and disvaluable), **then—by appeal to Occam’s razor—we have at least a pro tanto reason to resist the introduction of any further intrinsic values and disvalues. It is ontologically more costly to posit a plurality of intrinsic values and disvalues, so in case all values admit of explanation by reference to a single intrinsic value and a single intrinsic disvalue, we have reason to reject more complicated accounts.** **The fact that suggested non-hedonic intrinsic values tend to be hedonistic instrumental values does not, however, count in favor of hedonism solely in virtue of being most elegantly explained by hedonism; it also does so in virtue of creating an explanatory challenge for pluralists.** The challenge can be phrased as the following question: **If the non-hedonic values suggested by pluralists are truly intrinsic values in their own right, then why do they tend to point toward pleasure and away from pain?**27

**Moral uncertainty means preventing extinction should be our highest priority.  
Bostrom 12** [Nick Bostrom. Faculty of Philosophy & Oxford Martin School University of Oxford. “Existential Risk Prevention as Global Priority.” Global Policy (2012)]  
These reflections on **moral uncertainty suggest** an alternative, complementary way of looking at existential risk; they also suggest a new way of thinking about the ideal of sustainability. Let me elaborate.¶ **Our present understanding of axiology might** well **be confused. We may not** nowknow — at least not in concrete detail — what outcomes would count as a big win for humanity; we might not even yet **be able to imagine the best ends** of our journey. **If we are** indeedprofoundly **uncertain** about our ultimate aims,then we should recognize that **there is a great** option **value in preserving** — and ideally improving — **our ability to recognize value and** to **steer the future accordingly. Ensuring** that **there will be a future** version of **humanity** with great powers and a propensity to use them wisely **is** plausibly **the best way** available to us **to increase the probability that the future will contain** a lot of **value.** To do this, we must prevent any existential catastrophe.

#### Universizability requires the equal satisfaction of everyone’s preferences

**R. M. Hare** [White's Professor of Moral Philosophy at the University of Oxford from 1966 until 1983. “Universal Prescriptivism.” Originally published in Peter Singer, A Companion to Ethics (Blackwell Publishers, 1991)] **AJ**A possible move for one who is looking for the necessary constraints on moral thinking is to say that **unless I treat the person,** in **who**se place **I am imagining myself being**, **on equal terms with myself,** showing him equal concern, **I am not really imagining him as being me. This entails treating his preferences as of equal weight with my own** present preferences, and thus forming preferences for the hypothetical situation in which I am he, equal in strength to those which he actually has. This is what is involved in following the Golden Rule, doing to others as we wish others to do to us, and loving our neighbours as ourselves. It is also implicit in Bentham's maxim 'Everybody to count for one, nobody for more than one' (cited in Mill, 1861, Ch. 5 s.f.). The Kantian method we have been outlining is consistent with a form of utilitarianism (though not, we must add, exactly Bentham's form, because that is put in terms of pleasure, whereas Kant's theory is put in terms of will). It is wrong to think, as many do, that Kantianism and utilitarianism have to be at odds. **To treat a person** 'never simply as a means but always at the same time **as an end' requires, as Kant** himself **says** on the next page, **that 'the ends of a subject** who is an end in himself **must,** if this conception is to have its full effect [46] in me, **be also,** as far as possible**, my ends’** (1785, BA 69=430 f.). An end is what is willed for its own sake; **so we are,** according to Kant, **to give equal respect to everybody's** wills-for-**ends**, including our own; and **this is** what **util**itarianism also binds us do. **This involves,** in a harmless sense**, treating the ends of many people as if they were the ends of** one person **(myself).** But this does not involve failing to 'take seriously the distinction between persons' (Rawls, 1971,pp. 27, 187)- a distinction of which Kant and the utilitarians are well aware.

### 1NC – off

#### CP: Member nations of the World Trade Organization should enter into a prior and binding consultation with the World Health Organization over reducing intellectual property protections by implementing a one-and-done approach for patent protection s. Member nations will support the proposal and adopt the results of consultation.

#### WHO says yes

WHO 06 [(World Health Organization, specialized agency of the United Nations responsible for international public health) “Public health, innovation and intellectual property rights,” Report of the Commission on Intellectual Property Rights, Innovation, and Public Health, 2006] JL

Though difficult to discern from incremental innovation in practice, socalled “evergreening” is importantly different. As usually understood, “evergreening” occurs when, in the absence of any apparent additional therapeutic benefits, patent-holders use various strategies to extend the length of their exclusivity beyond the 20-year patent term. President Bush, in 2002, provided a working definition while announcing reforms in response to a Federal Trade Commission (FTC) report (73) on delays to the entry of generic products onto the market:

The FTC...discovered that some brand name drug manufacturers may have manipulated the law to delay the approval of competing generic drugs. When a drug patent is about to expire, one method some companies use is to file a brand new patent based on a minor feature, such as the color of the pill bottle or a specific combination of ingredients unrelated to the drug’s effectiveness … In the meantime, the lower-cost generic drug is shut out of the market … This is not how Congress intended the law to work. Today, I’m taking action to close the loopholes, to promote fair competition and to reduce the cost of prescription drugs in America … These steps we take today will not undermine patent protection. Instead, we are enforcing the original intent of a good law. Our message to brand name manufacturers is clear: you deserve the fair rewards of your research and development; you do not have the right to keep generic drugs off the market for frivolous reasons (81).

Evergreening can occur in a number of ways but typically, as noted by President Bush, it arises when companies file and obtain patents, subsequent to the original patent, on other aspects of the same compound or reformulations of the original compound in ways that might be regarded as of no incremental therapeutic value, but which are nevertheless patentable. For instance, strategies include a similar but different dosage form such as capsules rather than tablets, salts, esters, or crystals (polymorphs) of the same product or other changes dependent on the ingenuity of the formulators and the lawyers. These types of strategies occur in almost all jurisdictions, especially for lucrative products (see Box 4.7) (82, 83).

Where there is a linkage between the patent system and the procedures for approving new drugs (for example, in Canada and the United States), the policy issues take a particular form. In the United States, for instance, the Federal Trade Commission catalogued a number of instances where generic entry was delayed by up to fi ve years by successive stays of up to 30 months on the entry of a generic competitor (see Box 4.7). These stays were provided automatically under the United States law if a brand-holder challenged the generic company for infringement, until the changes announced by President Bush reduced this to one stay only.

These linkage arrangements are essentially supplementary to the patent system. But they alter the way in which the patent system operates for pharmaceutical products.15 Nevertheless, the final decisions on patent validity and infringement cases lie with the courts. This means that any change to tackle evergreening at its roots requires measures to reduce the likelihood of such patents being granted or, if granted, of being upheld in the courts. While, as previously stated, some forms of incremental innovation might be important in terms of patient benefit, faced with the reality of the TRIPS agreement, developing countries need to consider how their own patent laws may deal with this issue. Patents on minor developments are used, often aggressively, by some patent holders to delay or block generic competition. Small and medium-sized generic firms in developing countries, in particular, are generally unable to sustain costly and lengthy legal challenges, and opt to avoid fields where litigation may arise. The outcome may be the reduction or suppression of competition and, in some cases higher prices for patients.

#### Consultation displays strong leadership, authority, and cohesion among member states which are key to WHO legitimacy

Gostin et al 15 [(Lawrence O., Linda D. & Timothy J. O’Neill Professor of Global Health Law at Georgetown University, Faculty Director of the O’Neill Institute for National & Global Health Law, Director of the World Health Organization Collaborating Center on Public Health Law & Human Rights, JD from Duke University) “The Normative Authority of the World Health Organization,” Georgetown University Law Center, 5/2/2015] JL

Members want the WHO to exert leadership, harmonize disparate activities, and set priorities. Yet they resist intrusions into their sovereignty, and want to exert control. In other words, ‘everyone desires coordination, but no one wants to be coordinated.’ States often ardently defend their geostrategic interests. As the Indonesian virus-sharing episode illustrates, the WHO is pulled between power blocs, with North America and Europe (the primary funders) on one side and emerging economies such as Brazil, China, and India on the other. An inherent tension exists between richer ‘net contributor’ states and poorer ‘net recipient’ states, with the former seeking smaller WHO budgets and the latter larger budgets.

Overall, national politics drive self-interest, with states resisting externally imposed obligations for funding and action. Some political leaders express antipathy to, even distrust of, UN institutions, viewing them as bureaucratic and inefficient. In this political environment, it is unsurprising that members fail to act as shareholders. Ebola placed into stark relief the failure of the international community to increase capacities as required by the IHR. Guinea, Liberia and Sierra Leone had some of the world's weakest health systems, with little capacity to either monitor or respond to the Ebola epidemic.20 This caused enormous suffering in West Africa and placed countries throughout the region e and the world e at risk. Member states should recognize that the health of their citizens depends on strengthening others' capacity. The WHO has a central role in creating systems to facilitate and encourage such cooperation.

The WHO cannot succeed unless members act as shareholders, foregoing a measure of sovereignty for the global common good. It is in all states' interests to have a strong global health leader, safeguarding health security, building health systems, and reducing health inequalities. But that will not happen unless members fund the Organization generously, grant it authority and flexibility, and hold it accountable.

#### WHO diplomacy solves great power conflict

Murphy 20 [(Chris, U.S. senator from Connecticut serving on the U.S. Senate Foreign Relations Committee) “The Answer is to Empower, Not Attack, the World Health Organization,” War on the Rocks, 4/21/2020] JL

The World Health Organization is critical to stopping disease outbreaks and strengthening public health systems in developing countries, where COVID-19 is starting to appear. Yemen announced its first infection earlier this month, and other countries in Africa, Asia and the Middle East are at severe risk. Millions of refugees rely on the World Health Organization for their health care, and millions of children rely on the WHO and UNICEF to access vaccines.

The World Health Organization is not perfect, but its team of doctors and public health experts have had major successes. Their most impressive claim to fame is the eradication of smallpox – no small feat. More recently, the World Health Organization has led an effort to rid the world of two of the three strains of polio, and they are close to completing the trifecta.

These investments are not just the right thing to do; they benefit the United States. Improving health outcomes abroad provides greater political and economic stability, increasing demand for U.S. exports. And, as we are all learning now, it is in America’s national security interest for countries to effectively detect and respond to potential pandemics before they reach our shores.

As the United States looks to develop a new global system of pandemic prevention, there is absolutely no way to do that job without the World Health Organization. Uniquely, it puts traditional adversaries – like Russia and the United States, India and Pakistan, or Iran and Saudi Arabia – all around the same big table to take on global health challenges. It has relationships with the public health leaders of every nation, decades of experience in tackling viruses and diseases, and the ability to bring countries together to tackle big projects. This ability to bridge divides and work across borders cannot be torn down and recreated – not in today’s environment of major power competition – and so there is simply no way to build an effective international anti-pandemic infrastructure without the World Health Organization at the center.

## 1NC – off

#### Use a comparative worlds paradigm where the Affirmative must prove the plan is better than the status quo or a competitive policy option.

**Resolved denotes a proposal to be enacted by law**   
**Words and Phrases 1964** Permanent Edition   
Definition of the word “resolve,” given by Webster is “**to express an opinion or determination by resolution or vote; as ‘it was resolved by the legislature;**” It is of **similar** force **to the word “enact,”** which is **defined** by Bouvier **as** meaning “**to establish by law**”.

#### Ought means should

Merriam Webster, No Date – Merriam Webster’s Learner’s Dictionary, “ought”, <http://www.learnersdictionary.com/definition/ought>  
ought /ˈɑːt/ verb  
Learner's definition of OUGHT [modal verb] 1 ◊ Ought is almost always followed by to and the infinitive form of a verb. The phrase ought to has the same meaning as should and is used in the same ways, but it is less common and somewhat more formal. The negative forms ought not and oughtn't are often used without a following to. — used to indicate what is expected They ought to be here by now. You ought to be able to read this book. There ought to be a gas station on the way. 2 — used to say or suggest what should be done You ought to get some rest. That leak ought to be fixed. You ought to do your homework.

**Prefer our definitions – affirm and negate aren’t words in the resolution, and they don’t even appear on the ballot**

#### Net benefits:

#### Topic Education – Truth-testing moots topic education because it allows debaters to recycle generic arguments which deny the truth of everything. Outweighs other forms of education – we only have 2 months to debate the topic and can have discussions about other issues out of round.

#### Reciprocal burdens – proving a deductive argument is false only requires you win defense against one premise and proving an inductive argument is false is easier because of status quo bias. Comparative worlds solves because it eschews the idea that either side unilaterally carries the burden of proof, and requires both debaters to give an account of why their world is more desirable.

#### We are more inclusive

#### Did aff/neg above

#### Winning an arg is true =/= not tt

## 1NC – Case

### Framing

### Contention

#### reducing IP protections for medicines impedes on manufacturers’ abilities to set and pursue ends.

#### Kant justifies a fundamental right to property

Merges 11 [(Robert, Wilson Sonsini Goodrich & Rosati Professor of Law and Technology, University of California, Berkeley, School of Law) “Justifying Intellectual Property,” Harvard University Press, 2011] JL

Kant believed that any object onto which a person projects his or her will may come to be owned. Kant seemed to consider ownership as a primitive concept whose roots run very deep in human consciousness. This is evident from the language he uses. The origin of property, he says, is in a deep and abiding sense of “Mine and Yours.” “That is rightfully mine,” he writes, “if I am so bound to it that anyone who uses it without my consent would thereby injure me.”15

But what is the point of this? Why do people want to be bound to things? In essence, Kant says, to expand their range of freedom— their autonomy.16 People have a desire to carry out projects in the world. Sometimes, those projects require access to and control over external objects. The genesis of property is the desire of an individual to carry out personal projects in the world, for which various objects are necessary. For Kant, this desire must be given its broadest scope, to promote the widest range of human choice, and therefore human projects. Kant accordingly refuses to accept any binding legal rule that makes some objects strictly unownable, because the rationale for such a rule would conflict with the basic need for maximal freedom of action. Freedom to appropriate is so basic, so tied to matters of individual will and personal choice, that Kant finds it unthinkable to rule out large categories of things from the domain of the potentially ownable. As Kant scholar Paul Guyer says, for Kant, “The fundamental principle of morality dictates the protection of the external use of freedom or freedom of action, as a necessary expression of freedom of choice and thus as part of autonomy as a whole. . . .”17 This captures it in a nutshell: freedom of action, including the right to possess, as a necessary expression of freedom of choice, or autonomy.

#### IP is property

Schultz 14 [(Mark, Chair in Intellectual Property Law and the Director of the Intellectual Property and Technology Law Program at the University of Akron School of Law and co-founder and a leader of the Center for Intellectual Property x Innovation Policy at George Mason University) “A free market perspective on intellectual property rights,” American Enterprise Institute, 2/23/2014] JL

Point 1.Intellectual property secures the same values as physical property

As an institution, property secures rights in what we create through our work. In this regard, there’s no cause or need to distinguish intellectual property from any other forms of property. In all cases, a person employs his intellect and talents to impose his plan and will on his environment to bring something new into the world. This is the essence of productive labor, the fruits of which property protects.

Distinguishing between physical and intellectual labor, as some would, is misguided, because both are, at heart, the same activity. Whether it is a carpenter building a house, a farmer planting a field, an author writing a book, a director filming a movie, or an inventor developing a new drug, the activity is, ultimately, productive labor.

#### IP protections are central to human freedom – individuals must retain the right to control their creativity with the prospect of compensation

Merges 11 [(Robert, Wilson Sonsini Goodrich & Rosati Professor of Law and Technology, University of California, Berkeley, School of Law, and co-founder of the Berkeley Center for Law and Technology.) “Justifying Intellectual Property” Harvard University Press, 2011. https://www.law.berkeley.edu/wp-content/uploads/2019/10/JIP-Chapter-9.pdf] BC

Kant has complex ideas about creativity, ideas that track well with the structure of IP law. He begins with some primitive notions— the individual, his or her will, and the extension or application of that will onto objects. For Kant, the desire to shape and control things external to the self (that is, objects) is a powerful impulse for human beings. A project involving an external object may require that a person shape or control that object over a period of time. Therefore, human freedom depends, to some degree, on the ability to relate to an object in this way, to control and shape it over time. For some objects, this might be achieved by a per sis tent physical grasping, but this is obviously a limited strategy. Some objects are too big, hard to grasp, and so forth; generally, a more robust type of possession beyond physical grasping would be more effective in promoting the freedom to work on an object over time. Kant believes that this broader concept of possession is crucial to human freedom— so crucial, in fact, that it provides the impetus behind the creation of formal legal institutions, and hence civil society itself. For Kant, legal own ership is central to human freedom. Freedom, ownership, formal law, and then civil society: this is the key conceptual progression in Kant’s legal and political philosophy.

Contemporary theorizing about IP rights begins a long, long way from Kant’s system of thought, which is exactly why exposure to Kant can be so useful. Scholars today do not see individual freedom and the individual own ership it demands as the chief purpose of IP law. For most of them, IP law is strictly instrumental, a means to the ultimate end of net social welfare or the like. Kant cuts through this instrumental view as if wielding a knife blade. His thought upends amorphous concepts of collective interest and utilitarian balancing, replacing them with the bright, sharp idea of personal autonomy. The result is a more clear- headed focus on IP as a right, and on third- party interests as aspects or dimensions that are reached when we move outward from the starting point of the individual. Kant’s thought very effectively separates third- party interests from individual rights, a distinction I believe is essential to a proper understanding of IP law, especially at this point in the development of the field. An infusion of Kant promises to help correct the recent and intense emphasis on the rights of users and consumers of IP— a point I press in Part III.

Recasting IP in terms of Kantian rights does more than rebalance the field at the conceptual level, however. It leads to some immediate policy payoffs. Concern for autonomy, to take perhaps the most important example, goes beyond placing the rights of creators at the top of the legal hierarchy. It also means a thoroughly practical concern with the working conditions and economic prospects of creative professionals. Though this topic must await Chapter 7 for full development, the groundwork is laid in the discussion of Kantian property in Chapter 3. Autonomy is about something more than properly locating a set of legal rights at the apex of a conceptual pyramid. To be meaningful, it must have some cashvalue, so to speak; it must translate into putting a few dollars in one’s pockets. Creative people are rarely free to create, and cannot effectively shape their destiny, if they cannot control and have little prospect of being paid for their creative work. Autonomy, it must be recalled, means “self- rule,” the ability to steer oneself according to one’s own plan and design. There is little chance of doing this in a sustained way without own ownership over the products of one’s creativity. Own ownership confers both control and the prospect of compensation— the two practical dimensions of the abstract Kantian notion of autonomy.

### Impact

#### No extinction from disease

#### Resilience and countermeasures prevent spread – distinct from burnout

Adalja 16

Amesh Adalja is an infectious-disease physician at the University of Pittsburgh, The Atlantic, June 17, 2016, “Why Hasn't Disease Wiped out the Human Race?”, https://www.theatlantic.com/health/archive/2016/06/infectious-diseases-extinction/487514/

But when people ask me if I’m worried about infectious diseases, they’re often not asking about the threat to human lives; they’re asking about the threat to human life. With each outbreak of a headline-grabbing emerging infectious disease comes a fear of extinction itself. The fear envisions a large proportion of humans succumbing to infection, leaving no survivors or so few that the species can’t be sustained.

I’m not afraid of this apocalyptic scenario, but I do understand the impulse. Worry about the end is a quintessentially human trait. Thankfully, so is our resilience.

For most of mankind’s history, infectious diseases were the existential threat to humanity—and for good reason. They were quite successful at killing people: The 6th century’s Plague of Justinian knocked out an estimated 17 percent of the world’s population; the 14th century Black Death decimated a third of Europe; the 1918 influenza pandemic killed 5 percent of the world; malaria is estimated to have killed half of all humans who have ever lived.

Any yet, of course, humanity continued to flourish. Our species’ recent explosion in lifespan is almost exclusively the result of the control of infectious diseases through sanitation, vaccination, and antimicrobial therapies. Only in the modern era, in which many infectious diseases have been tamed in the industrial world, do people have the luxury of death from cancer, heart disease, or stroke in the 8th decade of life. Childhoods are free from watching siblings and friends die from outbreaks of typhoid, scarlet fever, smallpox, measles, and the like.

* 1. **Intervening actors check**

**Zakaria 9—**Editor of Newsweek, BA from Yale, PhD in pol sci, Harvard. He serves on the board of Yale University, The Council on Foreign Relations, The Trilateral Commission, and Shakespeare and Company. Named "one of the 21 most important people of the 21st Century" (Fareed, “The Capitalist Manifesto: Greed Is Good,” 13 June 2009, http://www.newsweek.com/id/201935)

Note—Laurie Garrett=science and health writer, winner of the Pulitzer, Polk, and Peabody Prize

It certainly looks like another example of crying wolf. **After bracing ourselves for a global pandemic, we've suffered** something more like **the usual seasonal influenza**. Three weeks ago the World Health Organization declared a health emergency, warning countries to "prepare for a pandemic" and said that the only question was the extent of worldwide damage. **Senior officials prophesied that millions could be infected** by the disease. **But as of last week, the WHO had confirmed only 4,800 cases** of swine flu, with 61 people having died of it. Obviously, these low numbers are a pleasant surprise, but it does make one wonder, what did we get wrong? **Why did** the **predictions of a pandemic turn out to be so exaggerated**? Some people blame an overheated media, but it would have been difficult to ignore major international health organizations and governments when they were warning of catastrophe. I think **there is a** broader **mistake in the way we look at the world.** Once we see a problem, we can describe it in great detail, extrapolating all its possible consequences. But **we** can **rarely anticipate the human response to that crisis. Take** **swine flu. The virus** **had crucial characteristics** **that led researchers to worry that it could spread far and fast**. They described—and the media reported—what would happen if it went unchecked. **But it did not go unchecked**. **In fact, swine flu was met by an extremely vigorous response at its epicenter**, **Mexico. The Mexican government reacted quickly** and massively, quarantining the infected population, testing others, providing medication to those who needed it. **The noted expert on this subject,** Laurie **Garrett, says, "**We should all stand up and scream, **'Gracias, Mexico**!' because the Mexican people and the Mexican government have sacrificed on a level that I'm not sure as Americans we would be prepared to do in the exact same circumstances. They shut down their schools. They shut down businesses, restaurants, churches, sporting events. **They** basically paralyzed their own economy. They've suffered billions of dollars in financial losses still being tallied up, and thereby **really brought transmission to a halt." Every time one of these viruses is detected**, writers and **officials bring up the Spanish influenza** epidemic **of 1918** in which millions of people died. Indeed, during the last pandemic scare, in 2005, President George W. Bush claimed that he had been reading a history of the Spanish flu to help him understand how to respond. **But the world we live in today looks nothing like 1918. Public health-care systems are far better** and more widespread than anything that existed during the First World War. **Even Mexico, a developing country, has a first-rate public-health system**—far better than anything Britain or France had in the early 20th century.

#### AMR superbugs have already arrived but new tech makes them preventable -- None of their ev says capabilities to solve superbugs are adequate – if they’re right that superbugs are so imminent and deadly, they need to read cards that say we could beat them

Knoss 18 [(Trent, science writer and beat contact at CU Boulder covering ecology, environmental science, technology, chemistry and engineering, internally cites Peter Otoupal, postdoctoral fellow at Lawrence Berkeley National Laboratory, Ph.D. in Chemical Engineering from CU Boulder) “How to stop an antibiotic-resistant superbug,” CU Boulder Today, 9/3/2018] JL

A genetic disruption strategy developed by CU Boulder researchers effectively stymies the evolution of antibiotic-resistant bacteria such as E. coli, giving scientists a crucial leg up in the ongoing battle against deadly superbugs.

These multidrug-resistant pathogens—which adapt to current antibiotics faster than new ones can be created—infect nearly 2 million people and cause at least 23,000 deaths annually in the U.S., according to data from the Centers for Disease Control.

In an effort to develop a sustainable long-term solution, CU Boulder researchers created the Controlled Hindrance of Adaptation of OrganismS (CHAOS) approach, which uses CRISPR DNA editing techniques to modify multiple gene expressions within the bacteria cells, stunting the pathogen’s central processes and thwarting its ability to evolve defenses.

The findings are outlined today in the journal *Communications Biology*and could open new research avenues on how to best restrict a pathogen’s antibiotic resistance.

“We now have a way to cut off the evolutionary pathways of some of the nastiest bugs and potentially prevent future bugs from emerging at all,” said Peter Otoupal, lead author of the study and a doctoral researcher in CU Boulder’s Department of Chemical and Biological Engineering (CHBE).

The CHAOS research is the culmination of work that began in 2013, when Otoupal and his colleagues began searching for genes that could act as a cellular kill switch for *E. coli*. When the scientists tweaked one gene at a time, the bacteria could adapt and survive. But when they altered two or more genes at once, the cell got weaker.

“We saw that when we tweaked multiple gene expressions at the same time—even genes that would seemingly help the bacteria survive—the bacteria’s fitness dropped dramatically,” Otoupal said.

#### Superbug impact is hype

**Tyson 12**{Greg, syndicated science columnist, PhD student in microbiology (Northwestern), “Tipping Point: The Threat of Antibiotic Resistance,” Helix, 8/17, http://helix.northwestern.edu/article/tipping-point-threat-antibiotic-resistance}

What happens if we stand pat? We won’t return to the Middle Ages, where plague wiped out one third of Europe’s population. The truth is that many of the most dangerous and widespread bacterial pathogens that truly deserve the moniker “superbug” have been tamed, especially in the United States. This is because for the healthy person, pathogens like MRSA are not an immediate threat. But people hospitalized and already sick with other conditions are in danger of contracting bacterial infections we are sometimes powerless to treat. It truly is a shame that we are constantly making medical advances in other fields, but have taken a step back in this area. Some potential solutions include treating infections with multiple antibiotics and offering greater incentives for the pharmaceutical industry to produce these products. Also, more specific therapies directed at toxins the bacteria produce could be used in conjunction with antibiotics to more effectively control infections. Stories about MRSA as a “superbug” are often overblown, causing unnecessary panic among people unlikely to get sick**.** Nevertheless, it rightfully draws attention to a public health problem that requires new solutions. The appropriate response is concern and action. But if we continue to ignore the problem, it can only get worse.

#### Solves warming

#### Disease outbreaks will be defeated with quarantines

**Szalai 7/26** [(Jennifer Szalai - author for the NYT) “The Extradordinary History (and likely busy future) of quarantine” The New York Times. 7-26-2021]

**Quarantine can be lifesaving**; it can also be dangerous, an exercise of extraordinary power in the name of disease control, a presumption of guilt instead of innocence.

In “Until Proven Safe,” a new book about quarantine’s past and future, Geoff Manaugh and Nicola Twilley do an impressively judicious job of explaining exactly why fears of quarantine are understandable and historically justified, while also showing how in coming years “we will almost certainly find ourselves more dependent on quarantine, not less.” Quarantine has to do with risk and uncertainty, and its logic is simple: “There might be something dangerous inside you — something contagious — on the verge of breaking free.”

**While medical advances have made some diseases more diagnosable** and less deadly, newfound knowledge can also accentuate the depths of our ignorance. The more we know, the more we know how much we don’t know — not to mention that **modern life, with escalating numbers of people and goods churning** their way **around the world**, has **increased the opportunities for contagion.**

Quarantine is distinct from isolation, even if the terms are often used interchangeably. Someone is isolated when they are known to be sick; **someone is quarantined when they might be but we cannot be sure**. Manaugh, an architecture and technology blogger, and Twilley, the co-host of a podcast about the science and history of food, bring an impressively wide range of interests to bear on a subject that involves not only infectious disease but also — in their ambitious yet seamless narration — politics, agriculture, surveillance and even outer space.

#### Quarantines solve climate change – COVID was responsible for the largest drop in emissions ever

**Alexander 20** [(Kurtis, a general assignment reporter for The San Francisco Chronicle, frequently writing about water, wildfire, climate and the American West. His recent work has focused on the impacts of drought, the widening rural-urban divide and state and federal environmental policy. Before joining the Chronicle, Alexander worked as a freelance writer and as a staff reporter for several media organizations, including The Fresno Bee and Bay Area News Group, writing about government, politics and the environment.) "Coronavirus has altered the global warming trajectory. But for how long?" San Francisco Chronicle, 5/20/20, https://www.sfchronicle.com/health/article/Greenhouse-gas-emissions-on-track-for-record-drop-15279312.php] TDI

The disruption caused by the coronavirus has been so profound that it’s altered the trajectory of global warming.

Not since World War II — and perhaps never before — have the emissions of heat-trapping gases dropped as much around the planet as they have during the COVID-19 outbreak.

The latest and most detailed study yet on the pandemic’s impact on climate pollution, published Tuesday and authored by the research group Global Carbon Project chaired by Stanford University’s Rob Jackson, finds that the Earth will see up to a 7% decrease in carbon dioxide this year. The dip is five times the decline in emissions in 2009, when the recession choked the world’s economy, and double what it was in 1992, after the fall of the Soviet Union.

The paper’s findings mirror other reports that have similarly found sharp drops in greenhouse gases recently. The emerging research also is in agreement that the lull will likely be short-lived and, at best, buy time before the most devastating effects of climate change take hold. The lockdown that has halted factories, energy plants and automobiles during the pandemic is already lifting, and without deliberate action, carbon-intense activities are bound to resume.

“That’s the danger here,” said Jackson, a professor of earth system science and senior fellow at Stanford Woods Institute for the Environment. “We’ve decreased emissions for the wrong reasons. Will they jump back up starting this fall, or could the virus allow us to rethink transportation and other parts of the economy?”

The answer to the question, say Jackson and others, may not be so straightforward. Greenhouse gases could rebound in some areas, and there could be lasting decreases in others.

Measuring heat-trapping gas emissions, for which carbon dioxide is a proxy, is not easy to do, especially in real time. The researchers at the Global Carbon Project analyzed daily economic activity in 69 countries from January through April and modeled the carbon pollution that likely resulted, then compared it to last year. The countries included have historically produced almost all of the world’s carbon dioxide.

The researchers found that China, the largest polluter, reduced emissions by nearly 24% on some days in mid-February. The United States, the second-largest polluter, cut emissions by nearly 32% for almost two weeks in mid-April. The European Union, including Great Britain, trimmed emissions by about 27% during the first week of April.

The dates of peak reductions varied in different parts of the globe because each locked down at a different time. The biggest cumulative drop in carbon dioxide was on April 7 and measured about 17%, according to the study.

While a variety of activity explains the declines, fewer people driving was the largest contributor worldwide. Less industrial pollution was also a big contributor.

Based on the observed drops in emissions, the researchers estimate that going forward, carbon dioxide will fall between 4% and 7% for the year worldwide, depending on how quickly countries end their lockdowns.

Jackson said the amount of the decline can be viewed as both considerable, given that it’s the largest ever seen, and humbling because it’s the minimum needed annually to put the planet on track to meet the Paris climate agreement — enough of a drop to prevent the global temperature from rising 2 degrees Celsius above preindustrial levels.

“We would need to do this every year,” he said.

The International Energy Agency recently projected an 8% dip in greenhouse gases for the year while the International Monetary Fund came up with an estimate closer to 6%. Both organizations said carbon pollution would likely rise again in 2021.

After the decline in emissions in 2009 of about 1.4%, the following year saw an increase of 5.1%.

The Global Carbon Project says there’s reason to think that at least some parts of the globe will try to prevent heat-trapping gases from bouncing back. Stimulus programs aimed at developing clean energy and new carbon-friendly ways of living adopted during the pandemic, such as working from home, could help limit emissions.

“Cities from Seattle to Milan are keeping roads closed to cars and letting them stay open to bikes and pedestrians even after the shelter-in-place,” Jackson said. “And maybe COVID-19 and stimulus funding will jump-start electric cars.”

#### Shutdowns solve climate change – substantially reduce emissions, air and water pollution, directs attention to climate

**Chow 20** [(Denise, a reporter for NBC News Science focused on general science and climate change) "Coronavirus shutdowns have unintended climate benefits: cleaner air, clearer water," NBC News, 3/18/20, https://www.nbcnews.com/science/environment/coronavirus-shutdowns-have-unintended-climate-benefits-n1161921] DRD

Concentrations of nitrogen dioxide in the atmosphere over Italy also fell precipitously, as they did in China. An analysis by The Washington Post found that the most dramatic drop was observed over northern Italy.

Nitrogen dioxide can irritate the lungs, and inhaling the pollutant can increase the risk of asthma and inflammation of the lungs. Although the noxious gas isn't thought to be a major contributor to climate change, studying its concentration in the atmosphere can help scientists understand other heat-trapping greenhouse gases that do drive global warming.

Jacqueline Klopp, co-director of the Center for Sustainable Urban Development at Columbia University in New York City, said she expects to see greenhouse gas emissions plummet across the board because of the quarantine measures.

"People were in their homes and really stopped a lot of the activities that lead to greenhouse gas emissions and other pollution," she said.

Early observations have shown that extreme social-distancing measures are likely also having an effect on air pollution at the city level in the U.S.

Jordan Wildish, a project director at Earth Economics, an environmental non-profit organization based in Tacoma, Washington, developed an online dashboard to track air quality in San Francisco, New York City and the Seattle area, comparing the measurements with figures from the same time last year.

In San Francisco, which is under shelter-in-place orders to control the spread of the coronavirus, the average concentration of fine particulate matter — tiny particles in the air that are dangerous because they can be breathed deeply into the lungs — over the past five days was almost 40 percent lower than the previous year.

In New York City, there was a 28 percent drop over the same period of time, and the Seattle-Tacoma-Bellevue saw a 32 percent decrease.

But experts warned that observed reductions are temporary and that as cities, countries and economies bounce back, so, too, will emissions — unless major infrastructure or societal changes are adopted.

Klopp said the pandemic could make companies and governments realize that other threats to humanity, including climate change, could be just as devastating and that it's imperative to develop protective measures.

#### Solves war

#### Disease pandemics decrease the likelihood of war

Walt 20 (Stephen M. Walt is the Robert and Renée Belfer professor of international relations at Harvard University; “Will a Global Depression Trigger Another World War?”; Foreign Policy; May 13, 2020; https://foreignpolicy.com/2020/05/13/coronavirus-pandemic-depression-economy-world-war/; ERB)

By many measures, 2020 is looking to be the worst year that humankind has faced in many decades. We’re in the midst of a pandemic that has already claimed more than 280,000 lives, sickened millions of people, and is certain to afflict millions more before it ends. The world economy is in free fall, with unemployment rising dramatically, trade and output plummeting, and no hopeful end in sight. A plague of locusts is back for a second time in Africa, and last week we learned about murderous killer wasps threatening the bee population in the United States. Americans have a head-in-the-sand president who prescribes potentially lethal nostrums and ignores the advice of his scientific advisors. Even if all those things magically disappeared tomorrow—and they won’t—we still face the looming long-term danger from climate change. Given all that, what could possibly make things worse? Here’s one possibility: war. It is therefore worth asking whether the combination of a pandemic and a major economic depression is making war more or less likely. What does history and theory tell us about that question? For starters, we know neither plague nor depression make war impossible. World War I ended just as the 1918-1919 influenza was beginning to devastate the world, but that pandemic didn’t stop the Russian Civil War, the Russo-Polish War, or several other serious conflicts. The Great Depression that began in 1929 didn’t prevent Japan from invading Manchuria in 1931, and it helped fuel the rise of fascism in the 1930s and made World War II more likely. So if you think major war simply can’t happen during COVID-19 and the accompanying global recession, think again. But war could still be much less likely. The Massachusetts Institute of Technology’s Barry Posen has already considered the likely impact of the current pandemic on the probability of war, and he believes COVID-19 is more likely to promote peace instead. He argues that the current pandemic is affecting all the major powers adversely, which means it isn’t creating tempting windows of opportunity for unaffected states while leaving others weaker and therefore vulnerable. Instead, it is making all governments more pessimistic about their short- to medium-term prospects. Because states often go to war out of sense of overconfidence (however misplaced it sometimes turns out to be), pandemic-induced pessimism should be conducive to peace. Moreover, by its very nature war requires states to assemble lots of people in close proximity—at training camps, military bases, mobilization areas, ships at sea, etc.—and that’s not something you want to do in the middle of a pandemic. For the moment at least, beleaguered governments of all types are focusing on convincing their citizens they are doing everything in their power to protect the public from the disease. Taken together, these considerations might explain why even an impulsive and headstrong warmaker like Saudi Arabia’s Mohammed bin Salman has gotten more interested in winding down his brutal and unsuccessful military campaign in Yemen. Posen adds that COVID-19 is also likely to reduce international trade in the short to medium term. Those who believe economic interdependence is a powerful barrier to war might be alarmed by this development, but he points out that trade issues have been a source of considerable friction in recent years—especially between the United States and China—and a degree of decoupling might reduce tensions somewhat and cause the odds of war to recede. For these reasons, the pandemic itself may be conducive to peace. But what about the relationship between broader economic conditions and the likelihood of war? Might a few leaders still convince themselves that provoking a crisis and going to war could still advance either long-term national interests or their own political fortunes? Are the other paths by which a deep and sustained economic downturn might make serious global conflict more likely? One familiar argument is the so-called diversionary (or “scapegoat”) theory of war. It suggests that leaders who are worried about their popularity at home will try to divert attention from their failures by provoking a crisis with a foreign power and maybe even using force against it. Drawing on this logic, some Americans now worry that President Donald Trump will decide to attack a country like Iran or Venezuela in the run-up to the presidential election and especially if he thinks he’s likely to lose. This outcome strikes me as unlikely, even if one ignores the logical and empirical flaws in the theory itself. War is always a gamble, and should things go badly—even a little bit—it would hammer the last nail in the coffin of Trump’s declining fortunes. Moreover, none of the countries Trump might consider going after pose an imminent threat to U.S. security, and even his staunchest supporters may wonder why he is wasting time and money going after Iran or Venezuela at a moment when thousands of Americans are dying preventable deaths at home. Even a successful military action won’t put Americans back to work, create the sort of testing-and-tracing regime that competent governments around the world have been able to implement already, or hasten the development of a vaccine. The same logic is likely to guide the decisions of other world leaders too. Another familiar folk theory is “military Keynesianism.” War generates a lot of economic demand, and it can sometimes lift depressed economies out of the doldrums and back toward prosperity and full employment. The obvious case in point here is World War II, which did help the U.S economy finally escape the quicksand of the Great Depression. Those who are convinced that great powers go to war primarily to keep Big Business (or the arms industry) happy are naturally drawn to this sort of argument, and they might worry that governments looking at bleak economic forecasts will try to restart their economies through some sort of military adventure. I doubt it. It takes a really big war to generate a significant stimulus, and it is hard to imagine any country launching a large-scale war—with all its attendant risks—at a moment when debt levels are already soaring. More importantly, there are lots of easier and more direct ways to stimulate the economy

—infrastructure spending, unemployment insurance, even “helicopter payments”—and launching a war has to be one of the least efficient methods available. The threat of war usually spooks investors too, which any politician with their eye on the stock market would be loath to do. Economic downturns can encourage war in some special circumstances, especially when a war would enable a country facing severe hardships to capture something of immediate and significant value. Saddam Hussein’s decision to seize Kuwait in 1990 fits this model perfectly: The Iraqi economy was in terrible shape after its long war with Iran; unemployment was threatening Saddam’s domestic position; Kuwait’s vast oil riches were a considerable prize; and seizing the lightly armed emirate was exceedingly easy to do. Iraq also owed Kuwait a lot of money, and a hostile takeover by Baghdad would wipe those debts off the books overnight. In this case, Iraq’s parlous economic condition clearly made war more likely. Yet I cannot think of any country in similar circumstances today. Now is hardly the time for Russia to try to grab more of Ukraine—if it even wanted to—or for China to make a play for Taiwan, because the costs of doing so would clearly outweigh the economic benefits. Even conquering an oil-rich country—the sort of greedy acquisitiveness that Trump occasionally hints at—doesn’t look attractive when there’s a vast glut on the market. I might be worried if some weak and defenseless country somehow came to possess the entire global stock of a successful coronavirus vaccine, but that scenario is not even remotely possible. If one takes a longer-term perspective, however, a sustained economic depression could make war more likely by strengthening fascist or xenophobic political movements, fueling protectionism and hypernationalism, and making it more difficult for countries to reach mutually acceptable bargains with each other. The history of the 1930s shows where such trends can lead, although the economic effects of the Depression are hardly the only reason world politics took such a deadly turn in the 1930s. Nationalism, xenophobia, and authoritarian rule were making a comeback well before COVID-19 struck, but the economic misery now occurring in every corner of the world could intensify these trends and leave us in a more war-prone condition when fear of the virus has diminished. On balance, however, I do not think that even the extraordinary economic conditions we are witnessing today are going to have much impact on the likelihood of war. Why? First of all, if depressions were a powerful cause of war, there would be a lot more of the latter. To take one example, the United States has suffered 40 or more recessions since the country was founded, yet it has fought perhaps 20 interstate wars, most of them unrelated to the state of the economy. To paraphrase the economist Paul Samuelson’s famous quip about the stock market, if recessions were a powerful cause of war, they would have predicted “nine out of the last five (or fewer).” Second, states do not start wars unless they believe they will win a quick and relatively cheap victory. As John Mearsheimer showed in his classic book Conventional Deterrence, national leaders avoid war when they are convinced it will be long, bloody, costly, and uncertain. To choose war, political leaders have to convince themselves they can either win a quick, cheap, and decisive victory or achieve some limited objective at low cost. Europe went to war in 1914 with each side believing it would win a rapid and easy victory, and Nazi Germany developed the strategy of blitzkrieg in order to subdue its foes as quickly and cheaply as possible. Iraq attacked Iran in 1980 because Saddam believed the Islamic Republic was in disarray and would be easy to defeat, and George W. Bush invaded Iraq in 2003 convinced the war would be short, successful, and pay for itself. The fact that each of these leaders miscalculated badly does not alter the main point: No matter what a country’s economic condition might be, its leaders will not go to war unless they think they can do so quickly, cheaply, and with a reasonable probability of success. Third, and most important, the primary motivation for most wars is the desire for security, not economic gain. For this reason, the odds of war increase when states believe the long-term balance of power may be shifting against them, when they are convinced that adversaries are unalterably hostile and cannot be accommodated, and when they are confident they can reverse the unfavorable trends and establish a secure position if they act now. The historian A.J.P. Taylor once observed that “every war between Great Powers [between 1848 and 1918] … started as a preventive war, not as a war of conquest,” and that remains true of most wars fought since then. The bottom line: Economic conditions (i.e., a depression) may affect the broader political environment in which decisions for war or peace are made, but they are only one factor among many and rarely the most significant. Even if the COVID-19 pandemic has large, lasting, and negative effects on the world economy—as seems quite likely—it is not likely to affect the probability of war very much, especially in the short term.

#### Ceasefires and peace talks – COVID proves that pandemics incentivize them to avoid disease spread which caps global escalation.

Deirdre Shesgreen 20. Foreign Affairs Reporter at USA Today. 4/28/2020. “'War and disease travel together': Why the pandemic push for a global cease-fire is gaining ground.” https://www.usatoday.com/story/news/world/2020/04/28/coronavirus-un-secretary-wants-global-cease-fire-amid-pandemic/5163972002/. DOA: 9/4/2020. SIR.

When the head of the United Nations first called for a “global cease-fire” on March 23, it seemed like a quixotic quest that would fall on the deaf ears of warring guerrillas, militant terrorists and belligerent governments across the globe. But over the past month, fighters from Colombia to Ukraine have signaled a willingness to put down their weapons as the world confronts a deadly pandemic that could devastate civilian populations and armies alike. The 15-member U.N. Security Council may vote as early as this week on a resolution that demands an “immediate cessation of hostilities in all countries on its agenda” and calls for armed groups to engage in a 30-day cease-fire, according to a draft of the measure obtained by USA TODAY. Its fate is uncertain, and experts say it comes with many caveats and exceptions – including a loophole that could allow Russia to continue bombing civilians in Syria. Right now, world powers are still quibbling over several provisions. The Trump administration has objected to any language expressing support for the World Health Organization, among other provisions – disputes that could sink or stall the effort. President Donald Trump has blasted the WHO being biased toward China and accepting Beijing's statements about the coronavirus outbreak at face value. A State Department official declined to comment on the draft, citing ongoing negotiations. The official, who was not authorized to speak on the record, said the Trump administration supports the call for a global cease-fire but wants to ensure it will not hinder U.S. counterterrorism missions. If it passes, experts say its impact could be significant – albeit not sweeping – during an otherwise bleak moment of global crisis. “This is not a piece of paper that’s going to save the planet, and it’s not even going to stop some of the nasty wars that are burning out there,” said Richard Gowan, an expert on the United Nations and peacekeeping with the International Crisis Group, a nonpartisan organization that seeks to prevent conflict. “But it’s at least something which could help ease middle-sized and smaller conflicts in countries ranging from Colombia to Sudan, where we know that armed groups are actually interested in pausing violence and talking about peace during the COVID crisis.” It could also help staunch the flow of refugees in some war-ravaged countries – and thus slow the spread of COVID-19, said Barry Posen, an international professor of political science at the Massachusetts Institute of Technology. "War and disease travel together and are usually causative," Posen said. While a global cease-fire may sound lofty and idealistic, he said, it's also quite practical, particularly in places like Syria and Yemen, where health care is scarce and civilians are extremely vulnerable to disease. "The intrusion of COVID into that situation would make what's already a horror show into an even bigger horror show," he said. "If you can do a little something to suppress these wars at the moment, you would also be doing a little something to suppress the disease." And because these conflicts are also producing refugees, it could help limit the further spread of the illness if civilians are not forced to flee conflict zones. In this handout image released by the United Nations, U.N. Secretary-General Antonio Guterres holds a virtual press conference on April 3, 2020, at UN headquarters in New York. Guterres Friday renewed his call for a global cease-fire, urging all parties to conflict to lay down arms and allow war-torn nations to combat the coronavirus pandemic. "The worst is yet to come," Guterres said, referring to countries beset with fighting like Syria, Libya and Yemen. "The COVID-19 storm is now coming to all these theatres of conflict." The United Nation's secretary-general, , has used both lofty rhetoric and harsh reality in his pitch for the cease-fire. "There should be only one fight in our world today: our shared battle against COVID-19," he said in an April 3 news briefing on his effort. French President Emmanuel Macron has also championed the cease-fire proposal. So far, about 16 armed groups and more than 100 countries have endorsed the measure, according to an informal tally kept by U.N. officials. A few examples: In Colombia, a left-wing rebel group known as the ELN agreed to a cease-fire starting April and said it would consider reviving peace talks with the government. In Yemen, one side of that brutal war – the Saudi Arabia-led coalition – agreed to a unilateral cease-fire for at least a month, to help control the spread of coronavirus in a country already ravaged by starvation and other diseases. The Houthis, backed by Iran, have not yet signed on. In Syria, the Kurdish-led Syrian Democratic Forces agreed to a cease-fire, saying its fighters would defend themselves against attacks but not engage in offensive military action. “We hope that this humanitarian truce will help to open the door for dialogue and political solution and to put an end to the war in the world and Syria,” the SDF said in a statement.

#### No evergreening – generic competition occurs after original patents expire but consumers choose to buy follow-on products

Holman 18 [(Christopher M., Professor at the University of Missouri-Kansas City School of Law, where his primary research focus lies at the intersection of intellectual property and biotechnology) “Why Follow-On Pharmaceutical Innovations Should Be Eligible For Patent Protection,” Intellectual Property Watch, 9/12/2018] JL

Drug innovators are often accused of using secondary patents to “evergreen” the patent protection of existing drugs, based on an assumption that a secondary patent somehow extends the patent protection of a drug after the primary patent on the active ingredient is expired. As a general matter, this is a false assumption — a patent on an improved formulation, for example, is limited to that improvement and does not extend patent protection for the original formulation.

Once the patents covering the original formulation have expired, generic companies are free to market a generic version of the original product, and patients willing to forgo the benefits of the improved formulation can choose to purchase the generic product, free of any constraints imposed by the patent on the improvement. Of course, drug innovators hope that doctors and their patients will see the benefits of the improved formulation and be willing to pay a premium for it, but it is important to bear in mind that ultimately it is patients, doctors, and third-party payers who determine whether the value of the improvement justifies the costs.

#### Cancer innovation high now

Harris 6/2 [(Jason, Senior Editor at OncLive and managing editor for Oncology Fellows) “Innovation Fuels Breakthroughs for Rare Cancers,” Oncology Live, 6/2/2021] JL

Although investment in studying rare cancers historically was limited, research attention has increased during the last decade, partly through collaborations such as RARECANCERnet and several US initiatives such as the NCI’s My Pediatric and Adult Rare Tumor Network (MyPART).

The number of clinical trials focused on rare cancers has grown significantly since 2010, the IQVIA Institute for Human Data Science reported in May 2021. Studies for rare oncology indications represented 63% of all cancer trials launched in 2020 and 64% of all rare disease studies, the report said.9

Moreover, the rare cancer field shared in what turned out to be a robust year for oncology trial launches despite the COVID-19 pandemic, with more than 1600 studies initiated across all indications. Overall, approximately 500 products were in late-stage development for rare cancers, representing half of all therapies in the oncology pipeline.9

The research focus on rare cancers has helped fuel advancements. Among the initiatives that have aided in this progress is The Cancer Genome Atlas, which has led to the characterization of cell signaling networks and enabled the identification of targeted therapies, according to the American Society of Clinical Oncology (ASCO). In 2019, ASCO investigators named progress in treating rare malignancies as the Advance of the Year, citing 5 particularly notable developments10:

FDA approval for the combination of dabrafenib (Tafinlar) plus trametinib (Mekinist) for treating patients with BRAF-mutated anaplastic thyroid cancer

Findings showing that sorafenib (Nexavar) improves progression-free survival (PFS) for patients with desmoid tumors

Improved PFS results with lutetium Lu 177 dotatate (Lutathera) for patients with somatostatin receptor–positive midgut neuroendocrine tumors

New data showing that the combination of carboplatin, paclitaxel, and trastuzumab (Herceptin) improved survival for women with uterine serous carcinoma

Results leading to FDA approval for pexidartinib (Turalio), a colony-stimulating factor-1 inhibitor, in patients with symptomatic tenosynovial giant cell tumor

Since then, FDA approvals for rare diseases, including cancers, have continued to grow. In 2020, oncology approvals for rare cancers included these new drugs for patients with certain tumor types: naxitamab-gqgk (Danyelza) for neuroblastoma; avapritinib (Ayvakit) and ripretinib (Qinlock) for gastrointestinal stromal tumors; tazemetostat (Tazverik) for epithelioid sarcoma; pemigatinib (Pemazyre) for cholangiocarcinoma; and selumetinib (Koselugo) for neurofibromatosis type 1.11

#### Rare disease innovation high now

FDA 3/21 [“Rare Disease Day 2021: FDA Shows Sustained Support of Rare Disease Product Development During the Public Health Emergency,” FDA, 3/21/2021] JL

As the FDA focuses on the COVID-19 pandemic, the agency also remains dedicated to its crucial role in development of treatments for rare diseases. Patients with rare diseases often have few or no treatment options. In 2020, we continued to see significant progress in the development of treatments for rare diseases, also known as orphan products. Specifically, in 2020, the agency approved 32 novel drugs and biologics with orphan drug designation. In the Center for Drug Evaluation and Research (CDER), 31 of the 53 novel drug approvals, or 58%, were orphan designated products. In CBER, one of the five novel biologic approvals, or 20%, was an orphan designated product and another of these five approvals, although not orphan designated, is for use in a rare disease.

Among the many new orphan treatments in 2020, several are particularly noteworthy, including a new drug to treat certain people with Hutchinson-Gilford Progeria Syndrome and progeroid laminopathies, rare conditions caused by certain genetic mutations that lead to premature aging and a new drug to treat patients with hereditary angioedema, a rare disorder characterized by recurrent episodes of severe swelling (angioedema), most commonly in the limbs, face, intestinal tract, and airway. The FDA also approved a CAR T-cell therapy to treat adult patients with relapsed or refractory mantle cell lymphoma, a rare cancer and type of non-Hodgkin lymphoma affecting B-cells, a type of immune cell, in the mantle or outer ring of the lymph node follicles. CAR T-cell therapy involves collecting a patient’s own T-cells, another type of immune cell, and genetically modifying them in the laboratory to fight cancer cells and then infusing them back into the patient. In addition, the FDA approved a treatment to control bleeding episodes occurring in adults and adolescents 12 years of age and older with hemophilia A or B with inhibitors. This is the first product for hemophilia treatment that contains an active ingredient obtained from rabbits genetically engineered to produce a protein necessary for blood coagulation. This approval is an example of our efforts to advance safe biotechnology innovations to support public health.

In 2020, in order to facilitate, support, and accelerate the development of drugs and therapeutic biologics for rare diseases, CDER’s Office of New Drugs reorganization created a new rare disease hub. This reorganization created the Division of Rare Diseases and Medical Genetics by combining the expertise to evaluate and review marketing applications with certain rare diseases with the Rare Diseases Team to support and coordinate research, collaboration and communication for rare diseases policy and programming.