## Fwk

#### I value morality. Ethical Internalism is true:

#### [1] Epistemology – A) Equality –B) Inaccessibility

#### 2. Motivation – A) Externalist notions of ethics collapse to internal B) Empirics –

#### Thus, agents justify their actions based on individual moral preferences and deal with ethical dilemmas by prioritizing certain beliefs. It’s a constitutive feature of humanity to rationally maximize value under a particular index of the good. Gauthier 98, Essay by David Gauthier, Canadian-American philosopher best known for his neo-Hobbesian social contract theory of morality, “Why Contractarianism”, within the book Contractarianism and Rational Choice: Essays on David Gauthier’s Morals By Agreement. Book written by Peter Vallentyne [https://b-ok.cc/book/975363/60f3f7] 1998, ///AHS PB //Recut by Scopa

#### Fortunately, I do not have to defend normative foundationalism. One problem with accepting moral justification as part of our ongoing practice is that, as I have suggested, we no longer accept the world view on which it depends. But perhaps a more immediately pressing problem is that we have, ready to hand, an alternative mode for justifying our choices and actions. In its more austere and, in my view, more defensible form, this is to show that choices and actions maximize the agent ’s expected utility, where utility is a measure of considered preference. In its less austere version, this is to show that choices and actions satisfy, not a subjectively defined requirement such as utility, but meet the agent ’ s objective interests. Since I do not believe that we have objective interests, I shall ignore this latter. But it will not matter. For the idea is clear; we have a mode of justification that does not require the introduction of moral considerations. 11 Let me call this alternative nonmoral mode of justification, neutrally, deliberative justification. Now moral and deliberative justification are directed at the same objects – our choices and actions. What if they conflict? And what do we say to the person who offers a deliberative justification of his choices and actions and refuses to offer any other? We can say, of course, that his behavior lacks moral justification, but this seems to lack any hold, unless he chooses to enter the moral framework. And such entry, he may insist, lacks any deliberative justification, at least for him. If morality perishes, the justificatory enterprise, in relation to choice and action, does not perish with it. Rather, one mode of justification perishes, a mode that, it may seem, now hangs unsupported. But not only unsupported, for it is difficult to deny that deliberative justification is more clearly basic, that it cannot be avoided insofar as we are rational agents, so that if moral justification conflicts with it, morality seems not only unsupported but opposed by what is rationally more fundamental. Deliberative justification relates to our deep sense of self. What distinguishes human beings from other animals, and provides the basis for rationality, is the capacity for semantic representation. You can, as your dog on the whole cannot, represent a state of affairs to yourself, and consider in particular whether or not it is the case, and whether or not you would want it to be the case. You can represent to yourself the contents of your beliefs, and your desires or preferences. But in representing them, you bring them into relation with one another. You represent to yourself that the Blue Jays will win the World Series, and that a National League team will win the World Series, and that the Blue Jays are not a National League team. And in recognizing a conflict among those beliefs, you find  rationality thrust upon you. Note that the first two beliefs could be replaced by preferences, with the same effect. Since in representing our preferences we become aware of conflict among them, the step from representation to choice becomes complicated. We must, somehow, bring our conflicting desires and preferences into some sort of coherence. And there is only one plausible candidate for a principle of coherence – a maximizing principle. We order our preferences, in relation to decision and action, so that we may choose in a way that maximizes our expectation of preference fulfillment. And in so doing, we show ourselves to be rational agents, engaged in deliberation and deliberative justification. There is simply nothing else for practical rationality to be. The foundational crisis of morality thus cannot be avoided by pointing to the existence of a practice of justification within the moral framework, and denying that any extramoral foundation is relevant. For an extramoral mode of justification is already present, existing not side by side with moral justification, but in a manner tied to the way in which we unify our beliefs and preferences and so acquire our deep sense of self. We need not suppose that this deliberative justification is itself to be understood foundationally. All that we need suppose is that moral justification does not plausibly survive conflict with it.

**Since agents take their own ability to act as intrinsically valuable**

#### Thus, the standard is consistency with Contractarianism.

#### Prefer additionally –

#### 1. Flexibility – Contracts are key to a) Encompassing all other ethical calculus b) Value pluralism –

#### 2. Bindingness – A) Arising of Ethics B) Culpability

## Contention

#### I contend that the member nations of the World Trade Organization ought not reduce intellectual property protections for medicines.

#### [1] Stronger IPRs help equalize the bargaining field for developing countries to check western coercion which would diminish their place as world enforcer. Therefore, it’s not in mutual self-interest for them to remove IPs because they want to keep their own economies ahead of others.

**Hassan et al 10** “Intellectual Property and Developing Countries: A review of the literature: by Emmanuel Hassan, Ohid Yaqub, Stephanie Diepeveen. RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. [https://www.rand.org/content/dam/rand/pubs/technical\_reports/2010/RAND\_TR804.pdf] // ahs emi

Commonly, FDI and trade are seen as key determinants for economic development and poverty reduction in developing countries. Inward FDI can generate important spillovers for developing economies, resulting in the upgrading of domestic innovative capacity, increased R&D employment, better training and support to education. For most developing countries, international trade allows them to acquire high value-added goods through importation that are necessary for economic development, but which are not produced domestically. In turn, exports allow developing countries to transform underutilised natural resources and surplus labour into foreign exchange, in order to pay for imports to support economic growth. Consequently, a central aim of the literature has been to examine how **stronger IPRs in developing countries can give incentives to firms in developed countries to undertake cross-border investment in, and to export their goods** to, these countries. Recalling the ambiguous relationship between IPRs and the individual strategies of single firms from a theoretical point of view, researchers have investigated empirically the effects of stronger IPRs on inward FDI in developing countries and exports from developed to developing countries. The empirical **evidence suggests that** **stronger IPRs may positively affect the volume of FDI and exports, particularly in countries with strong technical absorptive capabilities where the risk of imitation is high. When such risk is weak, particularly in the poorest countries, firms in developed countries do not seem to be sensitive to the level of protection in developing countries.** Using disaggregated data on FDI and trade, the empirical literature also shows that stronger IPRs impact on the composition of FDI and trade. First, stronger IPRs seem to encourage FDI in production and R&D rather than in sales and distribution. Second – and more surprisingly – stronger IPRs do not have any effect on the exports of hightechnology products. There are at least two explanations for this somewhat surprising result. Many high-tech products are difficult to imitate, thereby international trade for these products is less sensitive to the level of protection than for other products. Furthermore, firms in developed countries may choose to distribute their high-tech products through FDI or licensing, instead of exporting them directly. Intellectual property rights, international technology transfer and domestic innovation Increasingly, harnessing technological progress is viewed by policymakers as a key priority to boost economic growth and improve living standards. In an open economy, technological progress can be driven either by technology diffusion or technology creation. In less advanced economies, technology absorption can drive economic growth because countries at the forefront of technology act as a driver for growth by expanding the stock of scientific and technological knowledge, pulling other countries through a ‘catch-up’ effect. However, the strength of this ‘catch-up’ effect at the technology frontier decreases with the level of technological development, to the benefit of technology creation. Indeed, technology creation by domestic firms becomes progressively more important as a country moves closer to the technology frontier, because catching up with the frontier translates into increasingly smaller technological improvement**. The empirical literature has examined the effects of IPRs on technological progress through these two main channels: technology absorption (i.e. international technology transfer) and technology creation (i.e. domestic innovation).** The empirical evidence suggests that **stronger IPRs in developing countries may encourage international technology transfer** through market-based channels,1 particularly licensing, at least in countries with strong technical absorptive capacities. In the context of strong IPRs, **firms in developed countries are more inclined to transfer** their technologies to developing countries through licensing rather than through exports and FDI, **since such rights allow them to retain control over their technologies. In the presence of weak IPRs, multinationals in developed countries seem to prefer to retain control over their technologies** through intra-firm trade with their foreign affiliates in developing countries or FDI. Nevertheless, the historical evidence shows that many developing countries have benefited from international technology transfer through non-market-based channels, especially reverse engineering and imitation, thanks to weak IPR regimes. The empirical literature **also shows that** **stronger IPRs can encourage domestic innovation**, at least in emerging industrialised economies. Nevertheless, the empirical literature suggests the existence of a non-linear function (i.e. a U-shaped curve) between IPRs and economic development, which initially falls as income rises, then increases after that.

#### [2] IP rights are included in multiple international contracts – the aff violates that.

**Franklin 13** - “International Intellectual Property Law” by Jonathan Franklin\* He earned his A.B., A.M. Anthropology and J.D. degrees from Stanford University and M.Libr. with a Certificate in Law Librarianship from the University of Washington. Prior to the University of Washington, he spent five years as an reference librarian and foreign law selector at the University of Michigan Law Library. In law school, he was a Senior Editor of the Stanford Environmental Law Journal and a Note Editor for the Stanford Law Review. He is a member of the American Association of Law Libraries. [https://www.asil.org/sites/default/files/ERG\_IP.pdf] // ahs emi

The most important international **agreements in intellectual property** law are listed here. Many of them are available in multiple formats, **includ**ing Microsoft Word, PDF, and HTML. In addition, This page was last updated February 8, 2013. 5 the links below link to the main pages for those treaties, rather than the HTML texts so that the reader can also find related protocols, notifications and signatories. ● Agreement on Trade-Related Aspects of Intellectual Property Rights ("**TRIPS**")(http://www.wto.org/english/docs\_e/legal\_e/legal\_e.htm#TRIPs) ● Berne Convention for the Protection of Literary and Artistic Works (http://www.wipo.int/treaties/en/ip/berne/index.html) ● **Hague Agreement** Concerning the Deposit of Industrial Designs (http://www.wipo.int/hague/en/legal\_texts/) ● International Convention for the Protection of New Varieties of Plants(http://www.upov.int/en/publications/conventions/index.html) ● **Madrid Agreement** Concerning the International Registration of Trademark (http://www.wipo.int/madrid/en/legal\_texts/) ● Paris Convention for the Protection of Industrial Property (http://www.wipo.int/treaties/en/ip/paris/index.html) ● **Patent Cooperation Treaty** (http://www.wipo.int/pct/en/texts/index.htm) ● **Trademark Law Treaty** (http://www.wipo.int/treaties/en/ip/tlt/index.html) ● **Universal Copyright Convention** (http://portal.unesco.org/en/) For other substantive, registration and classification treaties, see the treaty sections at the World Intellectual Property Organization (WIPO) (http://www.wipo.int/clea/en/index.jsp), IPRsonline (http://www.iprsonline.org/legalinstruments/international.htm), the Compleat World Copyright Web site (http://www.compilerpress.ca/CW/multi\_i.htm) and the intellectual property page at the Electronic Information System for International Law (EISIL) (http://www.eisil.org/). For bilateral treaties, one of the best sources is IPRsonline(http://www.iprsonline.org/legalinstruments/bilateral.htm). The focus of this Chapter is international law. Although it includes references to national domestic law (foreign law) **and** comparative law sources, other sites comprehensively cover national domestic law, such as WIPO’s Collection of Laws for Electronic Access (CLEA)(http://www.wipo.int/clea/en/index.jsp) (which is also referred to as WIPO Lex) or UNESCO’s Collection of National Copyright Laws(http://portal.unesco.org/culture/en/). For **additional** web sites that compile **national** intellectual property **laws** and decisions, see the relevant 6 section below. Practical Law Company’s Cross-border: Intellectual Property & Technology (http://us.practicallaw.com/about/cross-border-intellectual-property-technology) provides a substantial list of country comparisons touching on intellectual property law.

#### [3] There is no constraint on the ability to reduce IP because the UN can’t get an agreement.

#### [4] Forecloses the ability for future contracts.

Hilty et al 21 [Reto Hilty Director at the Max Planck Institute for Innovation and Competition and a professor at the University of Zurich Pedro Henrique D. Batista Doctoral student and Junior Research Fellow at the Max Planck Institute for Innovation and Competition Suelen Carls Senior Research Fellow at the Max Planck Institute for Innovation and Competition Daria Kim Senior Research Fellow at the Max Planck Institute for Innovation and Competition Matthias Lamping Senior Research Fellow at the Max Planck Institute for Innovation and Competition Peter R. Slowinski Doctoral student and Junior Research Fellow at the Max Planck Institute for Innovation and Competition; “10 Arguments against a Waiver of Intellectual Property Rights,” Oxford Law; 6/29/21; <https://www.law.ox.ac.uk/business-law-blog/blog/2021/06/10-arguments-against-waiver-intellectual-property-rights>] Justin

2. Intellectual property rights are the **basis for collaborations and contracts** The development cycle of the new mRNA and vector vaccines—from the provision of the technological basis to safety studies and marketing authorisation—is tremendously multifaceted. Nevertheless, throughout the development, production and distribution of vaccines against Covid-19, cooperation has reached an **unprecedented** level—despite the typically fierce competition in the biopharmaceutical sector. Intellectual property rights and particularly patents are normally the basis for such cooperation; they provide assurance that contracts will be **fulfilled. Even a temporary waiver** of these rights may therefore have **detrimental consequences for the willingness to cooperate**.

## 2-DA

#### Reducing IP protection takes away incentives for innovation and prevents R&D for future and current diseases.

Michael Rosen, 5-12-2021, "Biden’s surprising patent waiver decision raises more problems than it solves," American Enterprise Institute - AEI, <https://www.aei.org/technology-and-innovation/bidens-surprising-patent-waiver-decision-raises-more-problems-than-it-solves/> [LDC 21 – CWK]/ recut mc

The Joe Biden administration caught many by surprise last week when US Trade Representative Katherine Tai announced the US would support a petition filed last October at the World Trade Organization (WTO) by India and South Africa that would suspend intellectual property (IP) protections for COVID-19 vaccines to allow generic manufacturers to produce vaccine doses. Unfortunately, this waiver of patent rights will cause more harm than good. We examined this issue late last year when the Donald Trump administration — along with Australia, Brazil, Britain, Canada, the EU, Japan, Norway, and Sweden — opposed the petition. But now it’s back with a vengeance, with the US backing the move to halt the application of Trade-Related Aspects of Intellectual Property Rights (TRIPS) to COVID-19 vaccines. In her announcement, Tai asserted: This is a global health crisis, and the extraordinary circumstances of the COVID-19 pandemic call for extraordinary measures. The Administration believes strongly in intellectual property protections, but in service of ending this pandemic, supports the waiver of those protections for COVID-19 vaccines. . . . The Administration’s aim is to get as many safe and effective vaccines to as many people as fast as possible. As our vaccine supply for the American people is secured, the Administration will continue to ramp up its efforts — working with the private sector and all possible partners — to expand vaccine manufacturing and distribution. But while the decision won plaudits among those skeptical of IP rights in particular, the TRIPS waiver mostly won’t do what they say it will, and will do what they say it won’t. As the American Intellectual Property Law Association (AIPLA) put it, we should be “concerned that the waiver approach is unlikely to lead to the desired result of widespread access to high-quality vaccines produced by qualified manufacturers and will negatively impact further innovation.” Specifically, the main drivers of vaccine unavailability in the developing world are not patents but the absence of deep freezer or refrigerator capacity, transportation, and other supply chain logistical issues. For instance, Moderna has already agreed to forgo patent protection for its vaccine, but no generic manufacturer has yet produced it, and India hasn’t even yet approved the Pfizer vaccine. Worse, a long and winding road remains for the production of cheap and plentiful versions of the vaccine, as some European countries still oppose the waiver, which must wend its way through layers of WTO bureaucracy. Even if approved, the waiver won’t bear fruits for many months as generic manufacturers learn how to make sufficient supply to exacting health and safety standards. As the Biotechnology Industry Association observed: Handing needy countries a recipe book without the ingredients, safeguards, and sizable workforce needed will not help people waiting for the vaccine. Handing them the blueprint to construct a kitchen that — in optimal conditions — can take a year to build will not help us stop the emergence of dangerous new COVID variants. And while the TRIPS waiver won’t provide much help, it will hurt innovation, as biotech companies will find themselves less willing to invest billions of dollars in research and development funds the next time a pandemic comes around — or even as COVID-19 variants proliferate. If these pioneering drug developers lack confidence that their inventions will enjoy appropriate protection, they’ll be less likely to risk blood and treasure to create them. As the AIPLA’s president explained, “IP protection incentivizes innovation and collaboration. Implementation of the proposed TRIPS waiver would have a chilling effect on research and development to address future health threats, including COVID-19 variants.” Instead of supplying additional vaccine doses or providing desperately needed equipment to house and transport them, the Biden administration chose to undermine IP and provide false hope to the suffering. Perhaps for this reason, The Wall Street Journal Editorial Board labeled the Biden move “the single worst presidential economic decision since Nixon’s wage-and-price controls.” The Journal may not be wrong.

**Future pandemics will cause extinction – it only takes one ‘super-spreader’.**

**Bar-Yam 16** Yaneer Bar-Yam 7-3-2016 “Transition to extinction: Pandemics in a connected world” <http://necsi.edu/research/social/pandemics/transition> (Professor and President, New England Complex System Institute; PhD in Physics, MIT)//Elmer

Watch as one of the more aggressive—brighter red — strains rapidly expands. After a time it goes extinct leaving a black region. Why does it go extinct? The answer is that it spreads so rapidly that it kills the hosts around it. Without new hosts to infect it then dies out itself. That the rapidly spreading pathogens die out has important implications for evolutionary research which we have talked about elsewhere [1–7]. In the research I want to discuss here, what we were interested in is the effect of adding long range transportation [8]. This includes natural means of dispersal as well as **unintentional dispersal by humans**, like adding airplane routes, which is being done by real world airlines (Figure 2). When we introduce long range transportation into the model, the success of more aggressive strains changes. They can use the **long range transportation** to find new hosts and **escape local extinction**. Figure 3 shows that the more transportation routes introduced into the model, the **more higher aggressive pathogens are able to survive and spread**. As we add more long range transportation, there is a critical point at which pathogens become so aggressive that **the entire host population dies**. The pathogens die at the same time, but that is not exactly a consolation to the hosts. We call this the phase transition to **extinction** (Figure 4). With increasing levels of global transportation, **human civilization** may be approaching **such a critical threshold**. In the paper we wrote in 2006 about the dangers of global transportation for pathogen evolution and pandemics [8], we mentioned the risk from Ebola. Ebola is a horrendous disease that was present only in isolated villages in Africa. It was far away from the rest of the world only because of that isolation. Since Africa was developing, it was only a matter of time before it reached population centers and airports. While the model is about evolution, it is really about which pathogens will be found in a system that is highly connected, and Ebola can spread in a highly connected world. The traditional approach to public health uses historical evidence analyzed statistically to assess the potential impacts of a disease. As a result, many were surprised by the spread of Ebola through West Africa in 2014. As the connectivity of the world increases, past experience is not a good guide to future events. A key point about the phase transition to extinction is its **suddenness**. Even a system that seems stable, **can be destabilized** by a few more long-range connections, and connectivity is continuing to increase. So how close are we to the tipping point? We don’t know but it would be good to find out before it happens. While Ebola ravaged three countries in West Africa, it only resulted in a handful of cases outside that region. One possible reason is that many of the airlines that fly to west Africa stopped or reduced flights during the epidemic [9]. In the absence of a clear connection, public health authorities who downplayed the dangers of the epidemic spreading to the West might seem to be vindicated. As with the choice of airlines to stop flying to west Africa, our analysis didn’t take into consideration how people respond to epidemics. It does tell us what the outcome will be unless we respond fast enough and well enough to stop the spread of future diseases, which may not be the same as the ones we saw in the past. As the world becomes more connected, the dangers increase. Are people in western countries safe because of higher quality health systems? Countries like the U.S. have highly skewed networks of social interactions with some very highly connected individuals that can be **“superspreaders.”** The chances of such an individual becoming infected may be low but events like a mass outbreak pose a much **greater risk** if they do happen. If a sick food service worker in an airport infects 100 passengers, or a contagion event happens in mass transportation, **an outbreak could very well prove unstoppable**.

## 3-DA

### **Globally, the U.S leads in science**

SST ’21 – “SCIENCE COMMITTEE LEADERS CELEBRATE PASSAGE OF LEGISLATION TO FUND AMERICAN SCIENCE AND INNOVATION AT NSF AND DOE”, U.S House of Representatives Committee on Science, Space, & Technology, June 28th, 2021, [https://science.house.gov/news/press-releases/science-committee-leaders-celebrate-passage-of-legislation-to-fund-american-science-and-innovation-at-nsf-and-doe] Accessed 08/21/21 AHS // AP

The United States has long been a beacon of excellence in science and engineering,” said**Chairwoman Eddie Bernice Johnson (D-TX)** “We are at a time of markedly increased global competition in research and development. However, while we should be cognizant of our increasing global competition, we must not be constrained by it. To continue to lead, we must chart our own course. That starts with doubling down on the proven innovation engines we have at the National Science Foundation (NSF) and the Department of Energy’s (DOE’s) Office of Science. The *NSF for the Future Act* sets NSF on a path for significant andsustainable growth. The bill addresses challenges at all levels of STEM education and training. It supports activities and partnerships to broaden participation in NSF-funded projects. Finally, this bill establishes a new directorate to accelerate progress on emerging technologies and advance research-driven solutions to societal challenges like climate change and inequality. The DOE Office of Science is the nation's largest supporter of research in the physical sciences, and it is the lead federal agency supporting scientific research for energy applications. The *DOE Science for the Future Act* authorizes significant, steady, and sustainable growth for the Office’s wide-ranging research, from climate science to quantum science, and everything in between. I want to thank Ranking Member Lucas for his partnership in developing these two well-vetted bipartisan bills that are months, even years in the making. I look forward to working with the Senate in coming together to forge a strong path forward for NSF and DOE." "Today the House took important action to reassert America’s global scientific leadership and address the growing threat we face from the Chinese Communist Party,” said**Ranking Member Frank Lucas (R-OK)** “The National Science Foundation for the Future Act and the Department of Energy Science for the Future Act provide a comprehensive approach to investing in the research, infrastructure, and STEM workers that have long driven America’s success. They also provide critical protections against research theft by foreign adversaries and spur clean energy innovation that will reduce emissions without that hurting American wallets. These bills represent a strategic, sustainable, and sensible plan to maintain global competitiveness, protect our national security, and strengthen our economy for decades to come. America’s scientific and technological competitiveness has been my highest priority as Ranking Member of the Science Committee, and I appreciate all that Chairwoman Johnson has done to advance our shared goals and create a strong, bipartisan legislative package. I look forward to continuing to working together as we move these bills across the finish line." "I am thrilled that after an overwhelmingly bipartisan mark-up earlier this month, the House voted tonight to fund the National Science Foundation at historic levels and expand its important mission,” said **Chairwoman Haley Stevens (D-MI) of the Subcommittee on Research and Technology**. “NSF funded research has spurred innovations and launched new industries that advance our prosperity and competitiveness and improve our quality of life. Countries around the world have taken notice and are investing aggressively to replicate our success by building their own research base. The United States will continue to lead the world in scientific research and innovation, and I am incredibly proud to see this legislation pass today." "Investments in science and technology are drivers of economic growth and are essential if we want to maintain an edge on our greatest adversary, the Chinese Communist Party,” said**Ranking Member Mike Waltz (R-FL) of the Subcommittee on Research and Technology.** “For decades, the United States has led the world in science and technology innovation, but right now, China is gaining on us in nearly every statistic. Moving forward, it's critical we make strategic, realistic, and sustainable investments to build up our research and development enterprises while also protecting them from wholesale theft by the CCP. That’s why I'm proud the NSF For the Future Act passed in the House because investing in science and technology is investing in America’s future." "Science, innovation, and a robust STEM workforce are pillars of our society, and strong support for our scientific institutions is critical to addressing the most pressing challenges we face,” said **Chairman Jamaal Bowman (D-NY) of the Subcommittee on Energy**. “Federal research and development programs, like the climate science and green energy activities carried out at the Department of Energy’s (DOE) Office of Science, have an essential role to play a securing a safe, healthy, and prosperous future for us all. I applaud the passage of this forward-looking legislation, and I am proud to have contributed provisions on strengthening equity in climate modeling and advanced computing research. The DOE Science for the Future Act also supports critical workforce development for teachers and scientists. As an educator, I know firsthand how important it is to unlock the potential of all our students, including those from marginalized communities, to advance STEM research and shape the future. This bill will help us include everyone in our innovation agenda." "For generations, America has been the most technologically advanced country in the world, in large part due to the work done at the Department of Energy and its National Laboratory system,” said**Ranking Member Randy Weber (R-TX) of the Subcommittee on Energy.** “But now is not the time to rest on our laurels, the Chinese Communist Party is hot on our heels and would love nothing more than to supplant us as the global leader in science and technology. Funding the research and development done through our Labs and the Department of Energy’s Office of Science is the most efficient way to kickstart our technological growth and support American jobs. The DOE Science for the Future Act is a strategic investment in our R&D enterprise that gives the Department of Energy the tools it needs to continue developing cutting-edge technologies that will ensure that the 21st century remains an American century."

### **Patents are key to maintaining the lead**

Iancu ’21 – Andrei Iancu & David J. Kappos, Senior Adviser (Non-resident), Renewing American Innovation Project & Partner, Cravath, Swaine & Moore, “U.S. Intellectual Property Is Critical to National Security”, Center for Strategic & International Studies (CSIS), July 12th, 2021, [https://www.csis.org/analysis/us-intellectual-property-critical-national-security] Accessed 08/21/21 AHS // AP

For the United States to maintain its technological edge, we must encourage Americans to make more discoveries in AI and other emerging technologies. This in turn requires providing strong IP rights to incentivize and protect the huge investments required to make those discoveries. China’s president Xi Jinping recognizes the critical role IP plays in innovation and ultimately national security and has underscored its importance to new fields such as big data, AI, and genetic technology. The irony is that China relentlessly steals IP from the United States, while simultaneously working to strengthen its own IP system. China now reliably issues patents on cutting-edge technologies, provides injunctions for infringement of patented inventions, and has created specialty IP courts with procedures and rules similar to those of Western courts. China’s AI patenting has increased dramatically in the past few years and is distributed broadly across its companies, government organizations, and universities, while U.S. patenting on AI comes mostly from large companies. On the international stage, China uses its IP policies to attract innovation to its borders and influence the adoption of its technologies as global standards. Although we are undeniably in a race for technology leadership, the United States is failing to leverage IP to its full advantage. By including IP rights in the Constitution, America had granted itself a global head start in the industrial revolution. But the statute that defines the types of inventions eligible for patent protection has effectively not changed since 1793, well before any of the technologies of the modern era. This has left the Supreme Court to hold recently that some of the most critical inventions at the very core of AI and some other emerging technologies are outside the scope of our patent laws. This puts the United States at a significant disadvantage vis-à-vis our key competitors. We are also behind our competitors when it comes to IP policies surrounding the big datasets necessary for AI. If we are to maintain our technological lead, we must reexamine all such key IP weaknesses and embrace IP policies that will incentivize and protect investments in creating AI and other emerging technologies. These are bipartisan issues. As former directors of the United States Patent and Trademark Office (USPTO) in Democrat and Republican administrations, we know that the U.S. government has the expertise and capabilities to develop comprehensive IP policies to fuel innovation aligned with our national security interests. This government-wide expertise must be coordinated. A whole-of-government approach to develop comprehensive IP policies is exactly what has just been recommended by the National Security Commission on Artificial Intelligence (NSCAI). An independent commission created by Congress, NSCAI recently published a report that recommends elevating U.S. IP policy to a national priority integrated into our national security strategies. Under NSCAI’s proposal, the secretary of commerce, in coordination with the USPTO director and leaders of other agencies, would recommend reforms and new policies that strengthen our IP system and encourage more American innovation. As reflected in NSCAI’s recommendations, public deliberation with stakeholders in industry and academia will be critical in exploring these issues.

### **U.S leadership is key to solving biodiversity loss**

USAID ’15 – United States Agency for International Development, June 2015, [https://www.usaid.gov/sites/default/files/documents/1865/USAID%20Biodiversity%20Policy%20-%20June%202015.pdf] Accessed 08/23/21 AHS // AP

USAID can harness the intellectual power of research institutions to generate new tools to solve conservation and development problems. Partnerships with these institutions can contribute to increased understanding of biodiversity challenges and solutions through better data and analytics; provide a more rapid channel for new technologies, innovations, and research to be deployed in the field; and harness the enthusiasm and interest of students in development. These partnerships can also provide opportunities to build a cadre of qualified conservation professionals from the developing world, enabling capacity development of a constituency for biodiversity and sustainable development in the countries and regions where USAID works. USAID plays an active leadership and convening role with a “whole-of-government” approach for international biodiversity conservation, supported by its strong in-country presence globally and a dedicated budget for biodiversity conservation. The Agency already works with a wide array of USG entities with experience in forest, terrestrial, and marine wildlife management; monitoring; research; climate change; agricultural trade; food security; clean energy; and economic and trade policy. USAID can support global biodiversity conservation and sustainable development goals while advancing U.S. interests by continuing to coordinate and collaborate with other USG agencies in areas such as delivery of technical assistance and training to host countries, research, and international policy engagement. USAID values communication and coordination with other biodiversity donors, including bilateral institutions, multilaterals, and foundations, and works collaboratively to increase program impacts by leveraging funds and other resources. Country-specific coordination with bilateral and multilateral donors and foundations will continue to occur primarily at the USAID mission level, led by the technical staff located in-country. Donor coordination relating to international treaties and agreements and multilateral institutions, such as the Organization of Economic Cooperation and Development/Development Assistance Committee (OECD/DAC), the G-8, and the United Nations, will primarily be managed from USAID/Washington, in consultation with the field missions.

### **Biodiversity loss leads to extinction**

Watts ’18 – Jonathan Watts, is the Guardian's global environment editor, “Stop biodiversity loss or we could face our own extinction, warns UN”, The Guardian, November 6th, 2018, [https://www.theguardian.com/environment/2018/nov/03/stop-biodiversity-loss-or-we-could-face-our-own-extinction-warns-un] Accessed 08/23/18 AHS // AP

The world must thrash out a new deal for nature in the next two years or humanity could be the first species to document our own extinction, warns the United Nation’s biodiversity chief. Ahead of a key international conference to discuss the collapse of ecosystems, Cristiana Pașca Palmer said people in all countries need to put pressure on their governments to draw up ambitious global targets by 2020 to protect the insects, birds, plants and mammals that are vital for global food production, clean water and carbon sequestration. “The loss of biodiversity is a silent killer,” she told the Guardian. “It’s different from climate change, where people feel the impact in everyday life. With biodiversity, it is not so clear but by the time you feel what is happening, it may be too late.” Pașca Palmer is executive secretary of the UN Convention on Biological Diversity – the world body responsible for maintaining the natural life support systems on which humanity depends. Its members – 195 states and the EU – will meet in Sharm el Sheikh, Egypt, this month to start discussions on a new framework for managing the world’s ecosystems and wildlife. This will kick off two years of frenetic negotiations, which Pașca Palmer hopes will culminate in an ambitious new global deal at the next conference in Beijing in 2020. Conservationists are desperate for a biodiversity accord that will carry the same weight as the Paris climate agreement. But so far, this subject has received [miserably little attention](https://www.theguardian.com/environment/2018/mar/23/destruction-of-nature-as-dangerous-as-climate-change-scientists-warn) even though many scientists say it poses at least an equal threat to humanity. The last two major biodiversity agreements – in 2002 and 2010 – have failed to stem the [worst loss of life on Earth since the demise of the dinosaurs](https://www.theguardian.com/environment/2017/jul/10/earths-sixth-mass-extinction-event-already-underway-scientists-warn). Eight years ago, under the [Aichi Biodiversity Targets](https://www.theguardian.com/environment/2010/oct/29/biodiversity-talks-ministers-nagoya-strategy), nations promised to at least halve the loss of natural habitats, ensure sustainable fishing in all waters, and expand nature reserves from 10% to 17% of the world’s land by 2020. But many nations have fallen behind, and those that have created more protected areas have done little to police them. “Paper reserves” can now be found from Brazil to China. The issue is also low on the political agenda. Compared to climate summits, few heads of state attend biodiversity talks. Even before Donald Trump, the US refused to ratify the treaty and only sends an observer. Along with the Vatican, it is [the only UN state not to participate](https://www.cbd.int/information/parties.shtml). Pașca Palmer says there are glimmers of hope. Several species in Africa and Asia have recovered (though most are in decline) and forest cover in Asia has increased by 2.5% (though it has decreased elsewhere at a faster rate). Marine protected areas have also widened. But overall, she says, the picture is worrying. The already high rates of biodiversity loss from habitat destruction, chemical pollution and invasive species will accelerate in the coming 30 years as a result of climate change and growing human populations. By 2050, Africa is expected to lose 50% of its birds and mammals, and Asian fisheries to completely collapse. The loss of plants and sea life will reduce the Earth’s ability to absorb carbon, creating a vicious cycle. “The numbers are staggering,” says the former Romanian environment minister. “I hope we aren’t the first species to document our own extinction.”