**1**

1. Interpretation: The aff debater must disclose the entirety of their plan text and citations for the plan’s topical solvency advocate on the NDCA wiki at least an 20 minutes before the round.
2. Violation: admitted it’s new in texts 20 minute before rounds – can show screenshots at end of round if necessary
3. Standard: Predictability – the aff is a minute portion of dozens of topical advocacies in the literature where they got to cherry pick a part that easily flows aff and exclude topical disads while front-lining their plan, which gives them a massive preparation advantage and kills fairness. Forcing them to disclose ensures that I get more than 5 minutes total to prepare specific disadvantages against their infinitely prepped aff. Key to education since I have to be able to predict your positions to effectively engage. Also controls the internal link to plans good since I ensure an in-depth discussion on the issue that you bring to the table.
4. Voter: 1) Fairness – the judge is constrained by the ballot, which tells you to vote for whoever did the better debating, but they can’t determine that if the round is skewed against someone. 2) Education – it’s the constitutive aim of the activity and schools fund participation on the basis of education, so it’s necessary for debate to exist at all. Drop the debater since a) their abuse has irreparably skewed your evaluation of the better substantive debating, so drop the debater to compensate for my time lost and b) drop the argument drops their advocacy, so letting them keep going would be an advocacy shift, which moots all my speech time and feeds the abuse since I can’t predict that.
5. Framework: Theory is competing interps since a) any brightline for reasonability is arbitrary, which forces intervention; only minimization makes sense and b) it fosters a race to the top by promoting proactively better norms for debate. No RVI since a) it strategically disincentives theory to check unfair positions, b) commits the logical fallacy of denying the antecedent, since just because you prove that you’re being fair doesn’t mean that you win.

## K – Set Col

#### Settler colonialism structures the world in a settler-native-slave relationship, erasing indigenous peoples, causing constant ontological violence.

Tuck and Yang 12 [Eve Tuck is an award winning Unangax̂ scholar in the field of Indigenous studies and educational research. She is Associate Professor of Critical Race and Indigenous Studies at the Ontario Institute for Studies in Education (OISE), University of Toronto. Yang is a Ph.D. Social and Cultural Studies in Education, University of California, Berkeley] “Decolonization is not a metaphor”, Decolonization: Indigeneity, Education & Society //AA

Our intention in this descriptive exercise is not be exhaustive, or even inarguable; instead, we wish to emphasize that (a) decolonization will take a different shape in each of these contexts - though they can overlap - and that (b) neither external nor internal colonialism adequately describe the form of colonialism which operates in the United States or other nation-states in which the colonizer comes to stay. Settler colonialism operates through internal/external colonial modes simultaneously because there is no spatial separation between metropole and colony. For example, in the United States, many Indigenous peoples have been forcibly removed from their homelands onto reservations, indentured, and abducted into state custody, signaling the form of colonization as simultaneously internal (via boarding schools and other biopolitical modes of control) and external (via uranium mining on Indigenous land in the US Southwest and oil extraction on Indigenous land in Alaska) with a frontier (the US military still nicknames all enemy territory “Indian Country”). The horizons of the settler colonial nation-state are total and require a mode of total appropriation of Indigenous life and land, rather than the selective expropriation of profit-producing fragments. Settler colonialism is different from other forms of colonialism in that settlers come with the intention of making a new home on the land, a homemaking that insists on settler sovereignty over all things in their new domain. Thus, relying solely on postcolonial literatures or theories of coloniality that ignore settler colonialism will not help to envision the shape that decolonization must take in settler colonial contexts. Within settler colonialism, the most important concern is land/water/air/subterranean earth (land, for shorthand, in this article.) Land is what is most valuable, contested, required. This is both because the settlers make Indigenous land their new home and source of capital, and also because the disruption of Indigenous relationships to land represents a profound **epistemic, ontological, cosmological violence**. This violence is not temporally contained in the arrival of the settler but is reasserted each day of occupation. This is why Patrick Wolfe (1999) emphasizes that **settler colonialism is a structure and not an event.** In the process of settler colonialism, land is remade into property and human relationships to land are restricted to the relationship of the owner to his property. Epistemological, ontological, and cosmological relationships to land are interred, indeed made pre-modern and backward. Made savage. In order for **the settlers** to make a place their home, they must **destroy and disappear the Indigenous peoples that live there.** **Indigenous peoples are those who have creation stories, not colonization stories, about how we/they came to be in a particular place - indeed how we/they came to be a place**. Our/their relationships to land comprise our/their epistemologies, ontologies, and cosmologies. For **the settlers, Indigenous peoples are in the way and, in the destruction of Indigenous peoples, Indigenous communities, and over time and through law and policy, Indigenous peoples’ claims to land under settler regimes, land is recast as property and as a resource.** Indigenous peoples must be erased, must be made into ghosts (Tuck and Ree, forthcoming). At the same time, settler colonialism involves the subjugation and forced labor of chattel slaves, whose bodies and lives become the property, and who are kept landless. Slavery in settler colonial contexts is distinct from other forms of indenture whereby excess labor is extracted from persons. First, chattels are commodities of labor and therefore it is the slave’s person that is the excess. Second, unlike workers who may aspire to own land, the slave’s very presence on the land is already an excess that must be dis-located. Thus, the slave is a desirable commodity but the person underneath is imprisonable, punishable, and murderable. The violence of keeping/killing the chattel slave makes them deathlike monsters in the settler imagination; they are reconfigured/disfigured as the threat, the razor’s edge of safety and terror. The settler, if known by his actions and how he justifies them, sees himself as holding dominion over the earth and its flora and fauna, as the anthropocentric normal, and as more developed, more human, more deserving than other groups or species. **The settler is making a new "home" and that home is rooted in a homesteading worldview where the wild land and wild people were made for his benefit**. He can only make his identity as a settler by making the land produce, and produce excessively, because "civilization" is defined as production in excess of the "natural" world (i.e. in excess of the sustainable production already present in the Indigenous world). In order for excess production, he needs excess labor, which he cannot provide himself. The chattel slave serves as that excess labor, labor that can never be paid because payment would have to be in the form of property (land). The settler's wealth is land, or a fungible version of it, and so payment for labor is impossible.6 The settler positions himself as both superior and normal; the settler is natural, whereas the Indigenous inhabitant and the chattel slave are unnatural, even supernatural. **Settlers are not immigrants**. Immigrants are beholden to the Indigenous laws and epistemologies of the lands they migrate to. Settlers become the law, supplanting Indigenous laws and epistemologies. Therefore, settler nations are not immigrant nations (See also A.J. Barker, 2009). Not unique, the United States, as a settler colonial nation-state, also operates as an empire - utilizing external forms and internal forms of colonization simultaneous to the settler colonial project. This means, and this is perplexing to some, that dispossessed people are brought onto seized Indigenous land through other colonial projects. Other colonial projects include enslavement, as discussed, but also military recruitment, low-wage and high-wage labor recruitment (such as agricultural workers and overseas-trained engineers), and displacement/migration (such as the coerced immigration from nations torn by U.S. wars or devastated by U.S. economic policy). In this set of settler colonial relations, colonial subjects who are displaced by external colonialism, as well as racialized and minoritized by internal colonialism, still occupy and settle stolen Indigenous land. Settlers are diverse, not just of white **European descent, and include people of color, even from other colonial contexts**. This tightly wound set of conditions and racialized, globalized relations exponentially complicates what is meant by decolonization, and by solidarity, against settler colonial forces. Decolonization in exploitative colonial situations could involve the seizing of imperial wealth by the postcolonial subject. In settler colonial situations, seizing imperial wealth is inextricably tied to settlement and re-invasion. Likewise, the promise of integration and civil rights is predicated on securing a share of a settler-appropriated wealth (as well as expropriated ‘third-world’ wealth). Decolonization in a settler context is fraught because empire, settlement, and internal colony have no spatial separation. Each of these features of settler colonialism in the US context - empire, settlement, and internal colony - make it a site of contradictory decolonial desires7. Decolonization as metaphor allows people to equivocate these contradictory decolonial desires because it turns decolonization into an empty signifier to be filled by any track towards liberation. In reality, the tracks walk all over land/people in settler contexts. Though the details are not fixed or agreed upon, in our view, decolonization in the settler colonial context must involve the repatriation of land simultaneous to the recognition of how land and relations to land have always already been differently understood and enacted; that is, all of the land, and not just symbolically. This is precisely why decolonization is necessarily unsettling, especially across lines of solidarity. “Decolonization never takes place unnoticed” (Fanon, 1963, p. 36). Settler colonialism and its decolonization implicates and unsettles everyone.

#### The WTO as an mechanism is dangerous – indigenous rights are not respected despite rising climate issues and neoliberal globalization – don’t let them spin out of the WTO – their aff depends on the WTO as a unifying agent

Indigenous Environmental Network 1 [The Indigenous Environmental Network is a coalition of indigenous, grassroots environmental justice activists, primarily based in the United States. Group members have represented Native American concerns at international events such as the United Nations Climate Change conferences in Copenhagen and Paris]

https://www.ienearth.org/the-world-trade-organization-wto-and-indigenous-peoples-resisting-globalization-asserting-self-determination/The World Trade Organization (WTO) and Indigenous Peoples: Resisting Globalization, Asserting Self-Determination We, the Indigenous Peoples of Mother Earth gathered here in Bali, Indonesia on 2-6 December 2013, organizing our own workshop and various events parallel to the World Trade Organization Ninth Ministerial Meeting (WTO MC9), hereby agreed to resist neoliberal globalization and assert our right to Self-Determination. As Indigenous Peoples of the land and the waters, we have a close relationship to Mother Earth and nature. This relationship tells us that life on Mother Earth is in danger and coming to a time of great transformation. We are accepting the responsibility as the guardians of the earth, which has been designated by our respective Original Instructions woven into our cosmovisions, cultures, languages, and ways of life. We are telling the trade ministers of the world governments that we must all work together to create a new paradigm in global trade instruments and economic systems that fully recognizes the vital life-giving cycles, well-being and territorial integrity of Mother Earth. We reaffirm our responsibilities to protect and defend our lands, water, territories, natural resources, culture and traditional knowledge, all of which are vital to the survival of all of humanity and for future generations. We will persevere in our struggle in reclaiming our inherent rights as Indigenous Peoples and for the well-being of Mother Earth. Until the right to self-determination of Indigenous Peoples and universal laws that recognize Mother Earth as a living being are observed and respected, genuine sustainable development will not be achieved. We share a common history of colonization and globalization. For centuries, we experienced the colonization of our lands, territories, air, ice, oceans and waters, mountains and forests. Colonialism institutionalized the oppression and exploitation of Indigenous Peoples up to the current era of globalization, exacerbated by the neoliberal impositions of multilateral trade agreements implemented over six decades through the General Agreement on Tariffs and Trade (GATT), replaced by the World Trade Organization (WTO) in 1995. In its 9th Ministerial Conference, we believe that the WTO will only push for greater neoliberal policies on globalization, liberalization, privatization, deregulation, and denationalization that will consequently intensify the violation of our inherent rights as Indigenous Peoples and the multiple crises that humanity confronts today. Thus, with our common problems, aspirations and struggles, we resolved to strengthen our unity as Indigenous Peoples and link our struggles with various democratic sectors and organizations worldwide until our right to self-determination and liberation is achieved. The World Trade Organization and Violation of Indigenous Peoples’ Rights The WTO is the primary instrument of neoliberal globalization to further economic globalization especially in international trade. It aims to build a unitary system of trade relations of countries around the world governed by various agreements. WTO’s catchphrases of “borderless world”, “leveling the playing field” and “free market democracies”, involves the removal of restrictions or so-called trade barriers that hinder greater corporate profit. While the WTO binds the Least Developed Countries (LDCs) to implement the neoliberal policies on trade of goods and services, the few capitalist countries on the other hand, protect their economies from these “free market” policies. Several WTO Ministerials, such as the Doha Development Round in 2001, collapsed due to continuing disagreements over subsidies on agricultural products, market access, and special safeguard mechanisms, and massive Peoples’ protests. In its 9th Ministerial Conference, the WTO will make decisions on any of the multilateral trade related agreements such as the Agreement on Agriculture (AoA), Trade Related Aspects of Intellectual Property Rights (TRIPS), Trade Related Investment Measures (TRIMS), and General Agreement on Trade in Services (GATS), and forge new multilateral agreements. The proposed agreement for the MC9 called the Bali Package will push for greater liberalization in agriculture, acceleration of LDCs in the WTO, and expedite trade facilitation through restructuring of GATT articles on imports-exports and trade costs. The Bali Package, along with post-Bali issues on International Technology Agreement (ITA) and Trade in Services Agreement (TISA), are labeled by developed countries as the solution to the stalled Doha Round to pursue intensified trade liberalization. Indigenous Peoples, especially future generations, will be extremely affected by these decisions and agreements. For over 6 six decades now, since colonization, neoliberal policies have intensified the sufferings of the Indigenous Peoples. Our lands, territories and natural resources have been exploited by unsustainable development projects, such as mono-cultural chemically intensive plantations, extractive industries such as mining, oil drilling, hydro projects and other environmentally destructive “renewable” energy projects. Trade and investment liberalization have resulted in development aggression and plunder of our territories. We have been displaced from our Indigenous lands and territories. Our Indigenous knowledge, values and spirituality have been bastardized. And our rights to self-determination, to our own governance and own self-determined development have been violated. While defending our inherent and collective rights, we continue to suffer from militarization and State terrorism, including extrajudicial killings, enforced disappearance, assassination, arbitrary arrests, imprisonment, criminalization of community resistance, harassment and vilification as “terrorists.” All of this has happened for the sake of globalization, and is bound to worsen as the WTO imposes more agreements and policies. Our experiences show that the removal of tariffs and quantitative restrictions on import goods has led to the influx of foreign products in domestic markets. The AoA has unleashed agricultural liberalization and imposed the importation of agricultural crops even if locally produced. It has forced many developing countries to favor transnational agricultural companies like Monsanto and compelled impoverished Indigenous Peoples to use high yielding varieties (HYV) seeds without being informed of the negative effects. The AoA pushes for commercial agricultural production, replacing traditional plant varieties with genetically altered species marketed by agriculture companies, and chemical-laden foods. The AoA eliminates the ability of Indigenous Peoples to produce culturally appropriate and sufficient food. Such trading system is detrimental to Indigenous Peoples’ food security, health and sustainability. It forces dependency to the capitalist market and weakens Indigenous Peoples’ ability to self-determined development and food sovereignty. The WTO demands reduction of subsidies on price support, while capitalist countries refuse to apply this in their own economies. This has damaged livelihoods resulting in bankruptcy of farmers including Indigenous Peoples, as they are unable to compete with subsidized and cheaper imports from abroad. States worsen this situation by failing to protect Indigenous Peoples’ sources of livelihood and food, land and resources. Through our harmonious relations with nature as part of our spirituality, culture and beliefs, we maintain knowledge and practice of Indigenous medicines from medicinal plants and animals. We, however, are denied rights and control over our Indigenous medicines when these are taken over by big corporations as their intellectual property rights under WTO. Big pharmaceutical corporations race for patents to gain exclusive control for the production, marketing, distribution and sales of products derived from indigenous knowledge and practice. We are also alarmed that the WTO allows the patenting of life forms including extraction of genetic information under its TRIPS. These capitalist monsters treat Indigenous Peoples as valuable and vulnerable targets for medical research and experiments. Trade agreements on services have further marginalized and impoverished us, with very limited access to basic social and health services, a situation worsened by government neglect and discrimination. Our right to quality and affordable education and health is further violated by GATS which allows foreign corporations to own and operate educational and health institutions leading to profit-oriented and corporate owned services that are available only to the few who have the means to pay. Education is designed to meet the needs and interests of the multinational corporations and the advanced capitalist countries above the social values and needs of Indigenous communities and national development of poor countries. As a result, the youth and the next generations’ futures are bleak and the survival of our Indigenous knowledge is in peril. Globalization has even destroyed our biological and cultural diversity, ecosystems, values and traditional knowledge that constitute our existence as humans and as Indigenous Peoples. It is the culprit of the climate crisis, which exacerbates the historical, political, and economic marginalization of Indigenous Peoples. It puts Indigenous Peoples in a very vulnerable situation, notwithstanding the fact that Indigenous Peoples have contributed the least to the climate crisis. The dominant world capitalist system under which the WTO and similar trade agreements operate is the culprit to the multiple crises that humanity confronts today. The neoliberal policies of globalization, liberalization, deregulation, privatization and denationalization are the root causes of the protracted economic, financial, political, and climatic crises that have put Indigenous Peoples in more oppressive and exploitative conditions and the planet on the brink of destruction. The WTO MC9 in its Bali Package is hell-bent on pushing and imposing more new deals that would intensify our misery ten-fold, as it demands the acceleration of neoliberal globalization for more profit to the few ruling elite of the advanced capitalist countries and their transnational corporations above the interest of Indigenous Peoples, humanity and Mother Earth. Clearly, the WTO advances the neoliberal globalization framework and violates all the rights of Peoples, including Indigenous Peoples and Nations, to self-determination, life and liberty. The WTO is an instrument that serves the primary interest of the multinational corporations and the few advanced capitalist countries to the detriment of Indigenous Peoples worldwide, humanity, Mother Earth and all life.

#### The alternative is to reject the WTO and other trade systems to recognize indigenous people’s right to self-determination and sovereignty

Indigenous Environmental Network 2 [The Indigenous Environmental Network is a coalition of indigenous, grassroots environmental justice activists, primarily based in the United States. Group members have represented Native American concerns at international events such as the United Nations Climate Change conferences in Copenhagen and Paris] https://www.ienearth.org/the-world-trade-organization-wto-and-indigenous-peoples-resisting-globalization-asserting-self-determination/

#### We will persevere in our struggle to gain self-determination and autonomy. Until our right to self-determination is respected, genuine sustainable development will not be achieved. We are united to oppose and reject the commodification, privatization and plunder of nature, which includes the green economy, false- or market-based solutions including biodiversity and conservations offsets that put profit above humanity and the planet. We are in solidarity to resist neoliberal globalization. We are united to fight for our rights to self-determination and assert the future we want. We declare to Junk WTO, oppose new deals, and push for an alternative trade agenda appropriate to Indigenous Peoples. We push for an alternative trade system appropriate for us. We do not just reject trade per se, but push for trade systems that respect and recognize our traditional economies and governance. We envision systems that promote solidarity, mutual cooperation and respect, based on the needs and development of our communities and empowerment of our people. We demand systems that underpin our inherent right to self-determination and our permanent sovereignty over our traditional lands, territories and resources, forests, water, and everything that sustains life for the future generations. We demand systems that reject, and call for the abolition of, all colonial, unequal, and neocolonial trade agreements such as the WTO and other similar trade agreements. We will continue to strengthen our ranks and further develop and mobilize the capacities of the young generations and women in advancing our struggles against neoliberal globalization and its instruments like the WTO until its removal. We will link our struggles not only with Indigenous Peoples worldwide, but also with other Peoples’ movements, democratic and marginalized sectors and civil society organizations (CSOs) that have common goals and aspirations with that of Indigenous Peoples. We join the worldwide movement to Junk WTO and reject Neoliberal Globalization. We commit to consolidate our efforts to engage the WTO and other multilateral, regional and bilateral trade syndicates/agreements, and we strongly oppose agreements forged without our knowledge, participation, and consent. In our engagement to these trade agreements, we shall bring to the forefront as main points of assertion our inherent right to self-determination, self-determined and sustainable development, the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), the Alta Outcome Document and other declarations on our collective rights as Indigenous Peoples. We shall strive to achieve gains that go beyond the mechanisms and opportunities in the UN, and of the benevolence of States and governments. Like in other international fora, processes and mechanisms, we shall create our own spaces asserting our rights to lands, territories, and self-determination. We must take collective control of our natural resources based on the principles of people’s participation, gender equality, environmental and social justice, self-reliant and sustainable management systems and mindful of the needs of the whole of humanity while maintaining a deep respect, responsibility and recognition of the natural laws of Mother Earth and all creatures within. We must regain sovereignty over our lands and resources from multinational corporations and capitalist countries. We focus on building sustainable communities based on indigenous knowledge and peoples’ development, not on capitalist development. We must strive to promote and assert our sustainable ways of life, social and cultural values for the common good and the whole of society, collective interest over individual, service over profit, respect and care for nature and Mother Earth, including our viable solutions as opposed to false solutions to climate change. While we continue to unite as Indigenous Peoples worldwide, we also uphold the spirit of international solidarity with other sectors, organizations, activists and genuine advocates of our issues. This solidarity advances our global campaign for Indigenous Peoples’ rights to self-determination and liberation. Junk WTO! No New Deals! Our Immediate Demands As we conclude our workshop and events parallel to the WTO MC9, we state the following demands to the World Trade Organization, the States and Corporations: We demand for focus on new economies based on the principles of living in harmony with nature and governed by the absolute limits and boundaries of ecological sustainability, the carrying capacities of Mother Earth, and in recognition of the Universal Declaration on the Rights of Mother Earth. We demand for a stop to the capitalism of nature. All economic frameworks and trade regimes that privatize and financialise the functions of nature through green economy initiatives must be halted. Mother Earth is the source of life which needs to be protected, not a resource to be exploited and commodified as a natural capital. We call for the halt of all policies controlling the reproductive capacity of Mother Earth through market-based mechanisms that allow for the quantification and commodification of the natural processes of Mother Earth being branded as ecosystem services. We demand for the respect of Indigenous Peoples’ collective rights, such as but not limited to their traditional lands, territories, resources, free prior informed consent (FPIC), self-determination, culture and identity, and traditional management systems as enshrined in the UNDRIP and other international standards in negotiations and agreements. All trade agreements on investments, programs and projects affecting our lands, territories, communities, culture and identity without our FPIC must be immediately revoked and cancelled. We demand for the repeal of all trade agreements affecting us without our meaningful, full and effective participation and FPIC. Likewise, we demand for Indigenous Peoples’ full and active participation in decision-making processes and discourses on trade and other matters affecting us at all levels. Our right to FPIC is fundamental, and thus we continue to assert that this must be respected. Nothing About Us, Without Us! We demand for the full recognition of Indigenous Peoples’ inherent and inalienable right to self-determination and permanent sovereignty over our lands, territories, resources, air, ice, oceans, waters, mountains and forests. We demand an end to the militarization of our communities, for States and corporations to be held accountable on human rights violations, and ensured justice to the victims and their families and communities who have experienced such atrocities. Likewise, States should provide concrete support, such as appropriate technologies and funds, to help us develop for ourselves our own self-determined and sustainable development models and methods. Stop the theft and patenting of our traditional seeds, medicines, traditional knowledge, and our identity. Stop the commodification of our sacred culture for mega-tourism projects and other big businesses. Stop the criminalization of community resistance and end the culture of impunity. Pull out State armed forces in Indigenous territories, and uphold the responsibility to provide basic social services to Indigenous communities.

#### The ROB is to center indigenous knowledge production -- Our epistemology is a pre-requisite – they don’t get to weigh the case or their framing if we win their starting point is flawed

Ballantyne 14 [Erin Freeland, Dechinta Bush U, *Dechinta Bush University: Mobilizing a knowledge economy of reciprocity, resurgence and decolonization*, Decolonization: Indigeneity, Education & Society Vol. 3, No. 3, 2014, pgs 67-85,]

#### As the conversation of Dechinta grew, the ugly politics of education on a broad political scale quickly surfaced. It became clear that education is a domain of power and privilege that is fiercely protected. Questions relating to control over its content, production and process were, apparently, not open for discussion. Curricula were deeply homogenized, deterritorialized and standardized. Post-secondary in the territory was overtly geared toward training people for industry and the endless promise of mining, pipeline and oil and gas booms (and busts). People were either emphatically supportive of the notion of ‘Elders as professors’ being recognized as equals and collaborating with university professors, or incensed by its disruption of typical academic power. The creation of Dechinta was polarizing, and reactions were telling of the deeply embedded sense of entitlement and power that the state, and existing institutions, had over determining what did and did not count as ‘education’. Rather than support spaces where academic and Indigenous knowledge would overlap, Indigenous knowledge was viewed as curriculum that should be relegated to ‘culture camps’. That processes like hunting and moose-hide tanning could draw parallels, or even inform governance, consensus building and self-determination, continue to elude most mainstream reporters, critics and institutions. Coming back to the land is a battle. ‘Education’ on the land is a direct hit to the exoskeleton of continued colonial power. By specifically disrupting education as a domain of settler colonial control to be deconstructed and re-imagined, Dechinta has challenged the most comprehensive, yet skilfully cloaked machine of settler colonial capitalism - the prescriptive education process, which produces more settler colonial bodies, thinkers, and believers. Building strong relationships of reciprocity with the land results in the crumbling of settler capitalism because it fundamentally shifts the relationships people experience and what they believe about who they|||people||| are, how they are in relation to and with land, and what they believe to be true. Being together on the land, learning with the land, and having a strong relationship with the land is antithetical to settler capitalism itself. The power of settler colonization relies on the total deterritorialization of people’s relationship with land. Deleuze and Guattari’s (1972) work on deterritorialization, ‘the process whereby colonization leads not just to the loss of territory but also to the destruction of the ontological conditions of the colonized culture’s territoriality,’ is a fitting philosophical conjecture to Dene expressions of how they are dislocated from their relationships with land due to process of nation-building and capitalism, and how this deterritorialization separates people from practices with the land that keeps them healthy, even if they still live on the land (Deleuze and Guattari, 1987, p. 192; Hipwell, 2004, p. 304). As Said (1993) has stated: land, in the final instance, is what empire is about. In this way, our relationships with land are central to the great unsettling. Reconnection, and the exchange of skills, knowledge and practice with land, thus directly threaten the settler colonial project. It removes bodies from the forces designed to encode the body as capital. The foremost space of enclosure, of encoding, is the ‘school’. The ongoing trend in Indigenous and Northern settler education since its earliest colonial intrusion has been to train Indigenous bodies to serve the needs of industry. Education has happened in Denendeh since time immemorial. It has been the settler prerogative to dismantle Indigenous ways of knowing and being, of education. Returning learning to an intergenerational exchange, on the land - which has at its very core the fundamental teachings that, if we take care of the land, the land takes care of us - will shake the foundation of settler colonization by breaking the dependency that has been created on capitalism through deterritorialization. Transformational learning supports intergenerational learners and teachers to think critically and re-imagine what the purpose of learning is. Learning on the land is healing and being in community on the land is challenging, pulling our attention to the hard work of decolonization. The year after our initial gathering, Dechinta launched a pilot semester with three courses nested within an interdisciplinary approach. Student evaluations of the program indicated it was profoundly ‘transformative’, and was for some the first ‘safe space’ of education that they had encountered (Luig et al, 2011). Interdisciplinary and collaborative, the pilot set the stage for the following four years. Dechinta now has 8 original courses, and a two semester-long program growing into a full degree that operates from -50 winters to the steamy height of summer. The challenges have been substantial. Conflict between academics and Indigenous students have made real the tensions of working on decolonization in concert, even with those who identify, or who are identified as allies. Solving conflict and difficulties through shared governance circles, while combating ingrained reactions of lateral violence and other social expressions codified in settler colonization are truly challenging, but deeply rewarding. Through the building of relationships we have a growing cohort of faculty dedicated to not just teaching but sharing in the creation of safe spaces, where the hard mental work of decolonizing in theory is met with the even harder work of decolonizing as practice. When students and faculty create a community where their relationships are ordered through their relationships with land, the work of decolonization move from a discussion in theory to practice of being and becoming a source of decolonial power. At Dechinta we debate this, and experiment with its meaning in tangible ways. Here, skills categorized as ‘subsistence’ or ‘arts and crafts’ are fundamental in forming and understanding theory. Such practices are themselves theory in action. Utilitarian risk calculus is irredeemably violent and will always create zones of sacrifice drawn along lines of racist and colonial logics – even if their scaling of impact calculus to global extinction is necessary for assessing violence it is insufficient

**Grove 19** – Associate Professor of Political Science and Director of the Hawai’i Research Center for Future Studies at the University of Hawai’I at Mānoa, PhD in International Relations at Johns Hopkins University [Jairus, Savage Ecology: War and Geopolitics at the End of the World, DKP]

Rather than see these two career trajectories as opposed, I think Crutzen's thinking displays a continuous concern for the Northern Hemisphere and a particular cartography, rather than a geography, of human survival.9 Crutzen, as well as the concept of the Anthropocene itself, cannot escape preceding geopolitical conceptions of the Earth. Crutzen and others who rush so quickly to the necessity to transition efforts from climate abatement to climate mod¬ification are unsurprisingly not moved by claims that artificial cooling will likely cause droughts and famines in the tropics and subtropical zones of the global south; nor are they moved by how such plans may accelerate ocean acidification.10 **The utilitarian risk calculus that favors the greatest good for the greatest number has no geographical or historical sensibility of how unequally aggregate conceptions**

**of the good are distributed around the planet.** Global thinking, even in its scientific and seemingly universalist claims to an atmosphere that "we" all share, belies the geopolitics that enlivens scientific concern, as well as the global public policy agenda of geoengineering that seeks to act on behalf of it. Saving humanity as an aggregate, whether from nuclear war, Styrofoam, or climate turbulence, **has never meant an egalitarian distribution of survivors and sacrifices.** Instead, **our new cosmopolitanism**— the global environment—**follows** almost exactly the drawn lines, that is, the cartography or **racialized and selective solidarities and zones of indifference that characterize economic development**, the **selective application of combat, and,** before that, the **zones of** settlement and **colonization**. **More than a result of** contemporary **white supremacy** or lingering white privilege, the territorialization of who lives and who dies, **who matters and who must be left behind for the sake of humanity, represents a five-hundred-year geopolitical tradition of conquest, colonization, extraction, and the martial forms of life that made** them all **possible through war and** through more subtle and languid forms of **organized killing.** I am not suggesting that Crutzen and others are part of a vast conspiracy; rather, I want to outline how climate change, species loss, slavery, the elimination of native peoples, and the globalization of extractive capitalism are all part of the same global ordering. That is, all of these crises are geopolitical. The particular geopolitical arrangement of what others have called the longue durie, and what I am calling the Eurocene, is geologically significant but is not universally part of "human activity" despite the false syllogism at the heart of popular ecological thinking that a global threat to humanity must be shared in cause and crisis by all of humanity.11 Departing from Sloterdijk, I am hesitant to so easily locate modernity or explication as the root or cause of the global catastrophe. **No single** strategy, war, act of colonization, technological breakthrough, or **worldview fully explains** the **apocalypse before us. However, there is** something like what Gilles Deleuze and Felix Guattari call a **refrain** that **holds the vast assemblage together**, a geopolitical melody hummed along with the global expansion of a form of life characterized by homogenization rather than diversification. Accordingly, if we are to make some sense of such a vast world that is, even for Crutzen and Birks, "quite complex and difficult to model," I think we must consider the particular refrain of geopolitics that is capable of, by scientific as well as more humbly embodied standards, **destroying worlds** along with the world.12 **To eschew geopolitics** simply **because,** as a refrain, **it is too big**, too grand, or too universal **would ignore the conditions of possibility for nuclear weapons, power politics, and carbon-based globalization, and would greatly impoverish** the **explanatory capability of** even the best **climate models.** So maybe it is not so strange that Crutzen and others' attention to the nuclear threat of great powers has all but disappeared despite the fact that Russia and the United States still possess thousands of nuclear weapons, and as of late have been all too vocal about using them. Instead, the Anthropocene, as envisioned by Crutzen as a universal concern, requires with it a depoliticization of the causes of that concern. Therefore, Crutzen's **fascination with nuclear winter is geopolitical** not because it is about nuclear weapons—although that does not hurt. Rather, Crutzen's attention to nuclear winter is geopolitical because it is an image of the Earth system as a system with particular beneficiaries animating that interest. Sloterdijk's diagnosis of what I am terming the Eurocene, or the space of what he calls European "earth-users," is present in the very cybernetic understanding of the planet as a spatial and substantive whole.13 In the cases of both nuclear winter and climate change, the atmosphere is a model, or more accurately, the last model. The whole Earth becomes a single integer in a larger set of planet systems **rather than a set of habitats, zones, or locales.** The Earth is merely another system isomorphic as a unit of analysis with Mars or the exoplanet TRAPPIST-if. The shift in scale from place to the planetary is much more than a pulling back from the ground upward. The integrated Earth as the representation of a system and as an actual material system is aided by a process of integration, proceeded by a few hundred years of Sloterdijk's conception of explication where each part of each environment is disaggregated, described, and then reassembled to explain the whole. **The process of integration is not merely a metaphoric or metaphysical** geopolitics. **It is the condition of possibility to understand the planetary as being political, as well as the condition of possibility for its charting as an economic and military cartography.** Unlike the Weltanschauung of Heidegger's world image, the planetary "user space" requires five hundred years of conquest, fossil fuel extraction and exploitation, settlement, hundreds of expert fields from geography to chemistry to ecology, and the normative consolidation of cosmopolitanism as a right to the freedom of movement at least for those capable of the feat.14 **The worldview or world image alone is a necessary but insufficient cause**. **The practices that** habituated, expanded, and **intensified that worldview are what is critical to its emergence.** In this sense, the Anthropocene, like Crutzen's award-winning models of climate change and nuclear winter, is much more than an explanatory model. These models are the outcome of five centuries of integration and homogenization such that the infrastructure capable of making the Earth as a system knowable could be built, and the circulation of knowledge and data could be amassed to even make the diagnosis of a geological epoch in the first place.15 Properly accounting for the origins of our ecological crisis is vital. **No political project oriented** **toward the** many possible **futures** stretching out before us **can consider the questions of ecology and justice on a global**, much less geological, **scale unless we first take on the** unfortunate **historical generality of the Anthropocene. The continuing project of Europeanization, now led by U.S. imperial power** (although perhaps not for much longer), **is central to how the planet got to this point.** **Understanding this is essential for how any "we" worthy of the plurality of the planet can invent something less nasty and brutish than what currently counts as global order.** **A consideration of the Eurocene**, a geological history and name **that foregrounds the geopolitical confrontation** that stands in the way of any such future, **is required in order to take the scale of our predicament seriously, while also confronting the power politics that made that scale possible.**

## 1NC – T

#### Interpretation: medicines is a generic bare plural. The aff may not defend that member nations of the World Trade Organization reduce intellectual property protections for a subset of medicines.

Nebel 19 Jake Nebel [Jake Nebel is an assistant professor of philosophy at the University of Southern California and executive director of Victory Briefs.] , 8-12-2019, "Genericity on the Standardized Tests Resolution," Briefly, https://www.vbriefly.com/2019/08/12/genericity-on-the-standardized-tests-resolution/ SM

Both distinctions are important. Generic resolutions can’t be affirmed by specifying particular instances. But, since generics tolerate exceptions, plan-inclusive counterplans (PICs) do not negate generic resolutions. Bare plurals are typically used to express generic generalizations. But there are two important things to keep in mind. First, generic generalizations are also often expressed via other means (e.g., definite singulars, indefinite singulars, and bare singulars). Second, and more importantly for present purposes, bare plurals can also be used to express existential generalizations. For example, “Birds are singing outside my window” is true just in case there are some birds singing outside my window; it doesn’t require birds in general to be singing outside my window. So, what about “colleges and universities,” “standardized tests,” and “undergraduate admissions decisions”? Are they generic or existential bare plurals? On other topics I have taken great pains to point out that their bare plurals are generic—because, well, they are. On this topic, though, I think the answer is a bit more nuanced. Let’s see why. 1.1 “Colleges and Universities” “Colleges and universities” is a generic bare plural. I don’t think this claim should require any argument, when you think about it, but here are a few reasons. First, ask yourself, honestly, whether the following speech sounds good to you: “Eight colleges and universities—namely, those in the Ivy League—ought not consider standardized tests in undergraduate admissions decisions. Maybe other colleges and universities ought to consider them, but not the Ivies. Therefore, in the United States, colleges and universities ought not consider standardized tests in undergraduate admissions decisions.” That is obviously not a valid argument: the conclusion does not follow. Anyone who sincerely believes that it is valid argument is, to be charitable, deeply confused. But the inference above would be good if “colleges and universities” in the resolution were existential. By way of contrast: “Eight birds are singing outside my window. Maybe lots of birds aren’t singing outside my window, but eight birds are. Therefore, birds are singing outside my window.” Since the bare plural “birds” in the conclusion gets an existential reading, the conclusion follows from the premise that eight birds are singing outside my window: “eight” entails “some.” If the resolution were existential with respect to “colleges and universities,” then the Ivy League argument above would be a valid inference. Since it’s not a valid inference, “colleges and universities” must be a generic bare plural. Second, “colleges and universities” fails the upward-entailment test for existential uses of bare plurals. Consider the sentence, “Lima beans are on my plate.” This sentence expresses an existential statement that is true just in case there are some lima beans on my plate. One test of this is that it entails the more general sentence, “Beans are on my plate.” Now consider the sentence, “Colleges and universities ought not consider the SAT.” (To isolate “colleges and universities,” I’ve eliminated the other bare plurals in the resolution; it cannot plausibly be generic in the isolated case but existential in the resolution.) This sentence does not entail the more general statement that educational institutions ought not consider the SAT. This shows that “colleges and universities” is generic, because it fails the upward-entailment test for existential bare plurals. Third, “colleges and universities” fails the adverb of quantification test for existential bare plurals. Consider the sentence, “Dogs are barking outside my window.” This sentence expresses an existential statement that is true just in case there are some dogs barking outside my window. One test of this appeals to the drastic change of meaning caused by inserting any adverb of quantification (e.g., always, sometimes, generally, often, seldom, never, ever). You cannot add any such adverb into the sentence without drastically changing its meaning. To apply this test to the resolution, let’s again isolate the bare plural subject: “Colleges and universities ought not consider the SAT.” Adding generally (“Colleges and universities generally ought not consider the SAT”) or ever (“Colleges and universities ought not ever consider the SAT”) result in comparatively minor changes of meaning. (Note that this test doesn’t require there to be no change of meaning and doesn’t have to work for every adverb of quantification.) This strongly suggests what we already know: that “colleges and universities” is generic rather than existential in the resolution. Fourth, it is extremely unlikely that the topic committee would have written the resolution with the existential interpretation of “colleges and universities” in mind. If they intended the existential interpretation, they would have added explicit existential quantifiers like “some.” No such addition would be necessary or expected for the generic interpretation since generics lack explicit quantifiers by default. The topic committee’s likely intentions are not decisive, but they strongly suggest that the generic interpretation is correct, since it’s prima facie unlikely that a committee charged with writing a sentence to be debated would be so badly mistaken about what their sentence means (which they would be if they intended the existential interpretation). The committee, moreover, does not write resolutions for the 0.1 percent of debaters who debate on the national circuit; they write resolutions, at least in large part, to be debated by the vast majority of students on the vast majority of circuits, who would take the resolution to be (pretty obviously, I’d imagine) generic with respect to “colleges and universities,” given its face-value meaning and standard expectations about what LD resolutions tend to mean.

#### It applies to medicines:

#### Upward entailment test – spec fails the upward entailment test because saying that nations ought to reduce IPP for one medicine does not entail that those nations ought to reduce IPP for all medicines

#### Adverb test – adding “usually” to the res doesn’t substantially change its meaning because a reduction is permanent

#### Vote neg:

#### Semantics outweigh:

#### T is a constitutive rule of the activity and a basic aff burden – they agreed to debate the topic when they came here

#### Jurisdiction – you can’t vote aff if they haven’t affirmed the resolution

#### It’s the only stasis point we know before the round so it controls the internal link to engagement – there’s no way to use ground if debaters aren’t prepared to defend it

#### Limits – there are countless affs accounting for thousands of medicines – unlimited topics incentivize obscure affs that negs won’t have prep on – limits are key to reciprocal prep burden – potential abuse doesn’t justify foregoing the topic and 1AR theory checks PICs

#### There are over 20,000 affs

FDA 11/18 [(U.S. Food and Drug Administration, federal agency of the Department of Health and Human Service) “Fact Sheet: FDA at a Glance,” 11/18/2020] JL

There are over 20,000 prescription drug products approved for marketing.

FDA oversees over 6,500 different medical device product categories.

There are over 1,600 FDA-approved animal drug products.

There are about 300 FDA-licensed biologics products.

#### Ground – spec guts core generics like innovation that rely on reducing IP for all medicines because individual medicines don’t affect the pharmaceutical industry broadly – also means there is no universal DA to spec affs

#### TVA solves – read as an advantage to whole rez

#### Paradigm issues:

#### Drop the debater – their abusive advocacy skewed the debate from the start

#### Comes before 1AR theory – NC abuse is responsive to them not being topical

#### Competing interps – reasonability invites arbitrary judge intervention and a race to the bottom of questionable argumentation

#### No RVIs – fairness and education are a priori burdens – and encourages baiting – outweighs because if T is frivolous, they can beat it quickly

#### Fairness is a voter ­– necessary to determine the better debater

#### Education is a voter – why schools fund debate

#### Case: plan gets circumvented – foreign countries will just create patent protections for medicines that are almost close to the patented formula which still creates biopiracy

#### IP protections can be used as defensive measures for protection of traditional knowledge – empirics flow neg

Tesh Dagne 14, [© Tesh Dagne 2014. LL.B; LL.M; JSD; Assistant Professor of Law, Thompson Rivers University Faculty of Law, Kamloops, BC. This paper is part of a research project on control of access for the utilization of biodiversity resources, funded under the TRU Internal Research Fund. The author acknowledges the TRU Research Office for the support. Also, the author thanks Jessica DeMarinis for great research assistance. Protecting Traditional Knowledge in International Intellectual Property Law: Imperatives for Protection and Choice of Modalities, 14 J. Marshall Rev. Intell. Prop. L. 25 (2014)]/.anop

Given the effectiveness of IPRs in regulating economic relations, segments of stakeholders have recently become receptive to the possible use of IP as frameworks to protect TK for external use.110 Proposals to protect TK through IP mostly include either the use of existing IPRs, or the use of their modified versions in some cases, or the use of their amended version in others. Examples in the latter category include the application of case law interpreting unmodified statutes of IPRs in a manner that responds to the interest of ILCs. In this line, the Australian Aboriginal artists successfully invoked claims of copyrights and unfair trade practices against carpets imported from Vietnam that replicated Aboriginal arts.111 In resolving the dispute that arose, the Federal Court of Australia granted compensatory damages for “personal suffering” to take account of cultural aspects.112 It decided that even though only individuals could be recognized as copyright owners: [T]here may be scope…for the distribution of the proceeds of the action to those traditional owners who have legitimate entitlements, according to Aboriginal law, to share the compensation paid by someone who has, without permission, reproduced the artwork of an Aboriginal artist.”113 The jurisprudence developed from this and similar cases have generally helped to introduce the issue of TK into the Australian IPRs establishment.114 For example, the National Indigenous Arts Advocacy Association in Australia adopted the Indigenous Label of Authenticity in 1999 to help promote the marketing of the art and cultural products, and to deter the sale of products that are falsely labeled as originating from Aboriginal peoples.115 The result of the certification of authenticity in this manner, however, has not proved fruitful and thus, the initiative has been abandoned.116 New Zealand uses existing IPRs to provide defensive measures of TK protection.117 The New Zealand Trade Marks Act was amended to prohibit the registration of trademarks that would likely offend a significant segment of the community, including the indigenous Maori people.118 In addition, the Act allows the invalidation of a registered mark upon application by a person “culturally aggrieved,” even if the mark is distinctive of a registered owner.119 Bearing in mind the holistic nature of TK, it combines the use of IPRs with initiatives for sui generis approach to TK.120 In Canada, there has yet to be any amendments to IPRs legislation based on protection for TK and TK-based resources.121 As a working paper from the Department of Indian and Northern Development indicates, however, indigenous peoples in Canada directly utilize existing Copyrights and Trademark systems to establish rights on the products of their knowledge.122 This includes the use of copyrights in the woodcarvings of Pacific coast artists, including masks and totem poles, and in the silver jewelry of Haida artists.123 In the trademark regime, the Department of Indian and Northern Affairs uses the symbol Igloo as a certification mark, which identifies Inuit artwork as authentic.124 In addition, members and groups of Aboriginal peoples protect a number of marks as official marks and certification marks to identify a wide specter of goods and services, ranging from traditional art and artwork to food products, clothing, tourist services, and enterprises.125

#### **The problem is manufacturing not current patent protections - new production doesn’t scale in time and it destroys current production, limiting vaccine production - turns case**

Khemlani 5/5 (Anjalee, Anjalee Khemlani is a reporter at Yahoo Finance covering all things business, with a focus on health care. Khemlani has previously worked for a variety of media organizations that include startup digital, legacy daily news, international broadcast and local radio. Her most recent position was as a managing editor of ROI-NJ in New Jersey.). “US Talk of Waiving Vaccine Patents Is Merely Symbolic: Experts.” Yahoo.com, Yahoo Finance, 5 May 2021, finance.yahoo.com/news/us-talks-on-vaccine-patent-waivers-appears-symbolic-experts-214914469.html. Accessed 8 Aug. 2021.) //AA

The U.S. is supporting discussions about waiving vaccine patent rights in order to help increase vaccine production globally as a new wave of coronavirus cases, particularly in India, is causing concern. U.S. Trade Representative Katherine Tai said in a statement Wednesday the country would engage in text-based negotiations with the World Trade Organization. But Tai also tempered expectations, noting that, "Negotiations will take time given the consensus-based nature of the institution and the complexity of the issues involved." The negotiations center around the Trade-Related Aspects of Intellectual Property Rights, known informally as the TRIPS Agreement. Both India and South Africa pushed for waivers in October. Many health and policy experts, however, believe the move, while unprecedented, is unlikely to have any real impact. "I don't see what this move gets us in terms of getting more vaccines," said Craig Garthwaite, director of health care at the Kellogg School of Management at Northwestern University. Garthwaite told Yahoo Finance it appears more of a symbolic gesture to signal that the U.S. is taking the surge in India seriously. But if the Biden administration were taking the crisis more seriously, it would have already sent tens of millions of stockpiled AstraZeneca (AZN) doses to India, he said. The Biden administration has faced stark criticism over its hoarding of AstraZeneca doses, especially after Chief White House Medical Adviser Dr. Anthony Fauci said the U.S. would not need them. One vaccine expert, Dr. Peter Hotez at Baylor College of Medicine, said the U.S. doses would be a "drop in the bucket" of what India needs. Manufacturing bottleneck Experts like bioethicist NYU Langone's Dr. Arthur Caplan say the **patent waivers are** no morethan **a red herring**, "because no one is going to get a vaccine by next month." The issue hasn't been the technology, but rather the manufacturing process, Caplan told Yahoo Finance. So **a patent waiver and tech**nology **transfer is useless**, he added. The CEO of industry trade group BIO said in a statement that the effort is pointless, and the U.S. should instead focus on ramping up to provide to the world. "**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,**" Dr. Michelle McMurry-Heath said. Pfizer (PFE) CEO Albert Bourla recently told Yahoo Finance that the process to manufacture the vaccine involves 19 countries already — signifying a global effort for sourcing and production— for a technology that didn't exist at scale before the pandemic. "Right now, the bottleneck is related with the ability to ramp up manufacturing at the levels that the demand is. The issues are with raw materials that are in limited supply. These are highly specialized raw materials ... It's not simple chemicals," Bourla said. Which is why, even if a company were to get the technology and try to produce more vaccines, they wouldn't be able to sustain regular production, and it would take them at least two years to scale up, Bourla said. Garthwaite echoed Bourla's comments, noting that making a vaccine, "is not like trying to make a cheesecake." Meanwhile, Moderna (MRNA) had already voluntarily waived its patent enforcement in October, with no reports of takers on the offer. Even if there were, CEO Stéphane Bancel told Yahoo Finance that the company doesn't have resources to allocate to bring in a new partner. "Because we are still a small company, you know Moderna is 1,300 people ... the tech transfer would take resources away this year, to prepare for next year if we were to outsource the technology. That will limit our ability to make as many doses as we can this year," Bancel said.

#### Waivers don’t improve vaccine supply or distribution, but do allow for poorly made vaccines that undermine vaccine confidence

Delgado 5/25 [(Carla, health & culture journalist who’s written for Insider, Architectural Digest, Elemental, Observer, and Mental Floss) “Experts Say Patent Waivers Aren't Enough To Increase Global Vaccination,” Verywell Health, 5/25/2021] JL

“Waiving intellectual property rights for COVID-19 vaccines is likely to only have a modest impact on global vaccine supply,” William Moss, MD, executive director of the International Vaccine Access Center at the Johns Hopkins Bloomberg School of Public Health, tells Verywell. “A vaccine IP waiver is not in itself likely to lead to increased vaccine production in less developed countries because much more needs to be in place to increase the global vaccine supply.”

For several countries outside of the U.S. that have the necessary equipment to produce mRNA vaccines effectively and safely, the IP waiver can be of great help. However, many more countries lack this capacity, and this move still leaves them behind.

“The majority of the world’s countries lack the capacity to produce and distribute COVID-19 vaccines, and especially at the scale required to get this pandemic under control,” Richard Marlink, MD, director of the Rutgers Global Health Institute, tells Verywell. “They need funding, manufacturing facilities, raw materials, and laboratory staff with the technological expertise required.”

We've already seen what can go wrong with substandard vaccine manufacturing. In April, the Food and Drug Administration (FDA) inspected the Emergent BioSolutions factory in Baltimore and consequently shut down their production after concerning observations, which include:3

The factory was not maintained in a clean and sanitary condition.

Waste handling was found to be inadequate because generated waste was transported through the warehouse before disposal, which can potentially contaminate other areas.

Employees were seen dragging unsealed bags of medical waste from the manufacturing area across the warehouse.

Peeling paint, paint flecks, loose particles/debris were observed. There were also damaged floors and rough surfaces that cannot be properly cleaned and sanitized.

Employees were seen removing their protective garments where raw materials were staged for manufacturing.

They reportedly spoiled about 15 million doses of the Johnson and Johnson COVID-19 vaccine, and more than 100 million doses are on hold as regulators inspect them for possible contamination.4

“Vaccines are complex biological products, much more complex than drugs, and need to be produced by manufacturers and in facilities with the highest quality control standards,” Moss says. “Adverse events associated with a poorly made or contaminated batch of vaccines would have a devastating impact on vaccine confidence.”

In a statement last October, Moderna announced that they will not enforce their COVID-19-related patents against those who will make vaccines during this pandemic.5 While waiving some vaccine patents may allow third-party manufacturers to make and sell COVID-19 vaccines, the transfer of skills and technology that will allow them to manage production isn't very simple.

For instance, a spokesperson for Pfizer said that the Pfizer-BioNTech vaccine required 280 different components sourced from 86 suppliers across various countries. Manufacturing the vaccine would require highly specialized equipment and complex technology transfers.6

“Technology transfer also would need to be a critical component to expand vaccine manufacturing by other companies as an IP waiver is insufficient to provide the ‘know how’ needed to manufacture mRNA or adenovirus-vectored COVID-19 vaccines,” Moss says. “And supply chains for the reagents, supplies, and equipment would be needed.”

Interested manufacturers would need to have the proper equipment to test the quality and consistency of their manufacturing. At present, the World Health Organization (WHO) has plans to facilitate the establishment of technology hubs to transfer "a comprehensive technology package and provide appropriate training" to manufacturers from lower- and middle-income countries.7

While waiving vaccine patents is necessary, it's likely not enough. Additionally, negotiations about it are still ongoing. Even though the U.S. supports the waiver of COVID-19 vaccine patents, other countries like the United Kingdom, Japan, and Germany oppose it.8

It's also important to remember that manufacturing vaccines is only one step of the process of vaccinating the global population—distributing it is yet another hurdle.

“Many countries are counting on COVAX, a global collaboration to distribute COVID-19 vaccines more equitably around the world,” Marlink says. “The single largest supplier to COVAX is in India, where exports have been suspended since March due to the country’s COVID-19 crisis.”