

No Patents on Life! Campaign Newsletter

Winter 2021

Climate change. Species extinction. Plastic pollution. Soil loss. Pesticides. We are trashing the Earth.

The population sizes of mammals, birds, fish, amphibians and reptiles have seen an alarming average drop of 68% since 1970. This is cataclysmic news – a decrease because of pollution and destroyed habitats from the unsustainable consumption of humans. “This damage is not inevitable,” thundered Professor Ken Norris, the Zoological Society London’s director of science, “but a consequence of the way we choose to live.”

“I’m very concerned,” said Sir David Attenborough. “Put pressure on governments,” he instructs. “Because the big things that have to be done can be done only by governments. **If we go on this way we will lose everything.**”

<https://www.bigissue.com/interviews/sir-david-attenborough-if-we-go-on-this-way-we-will-lose-everything/>

<https://livingplanet.panda.org/>

And we’re trashing the planet while standing on the necks of the poor. Most of the news in this issue of the newsletter is about Covid-19 and how pharmaceutical companies’ patents are killing millions of people.

Drug Companies Are Killing People

July, 2021

“I get to say this about the drug companies, now that President Biden has said that Facebook is killing people because it was allowing people to use its system to spread lies about the vaccines. There is actually a better case against the drug companies.” (Dean Baker, Center for Economic and Policy Research)

<https://www.cepr.net/the-drug-companies-are-killing-people/>

Uneven vaccine distribution

April, 2021

Of the shots administered globally so far, 39% have gone to people in 27 wealthy nations that represent 11% of the world population. Countries making up the least-wealthy 11% have received 2% of inoculations.

<https://www.japantimes.co.jp/news/2021/04/22/world/us-drug-intellectual-property-waiver/>

March, 2021

Countries such as South Africa have had to pay double the price for the Oxford-AstraZeneca vaccine for fewer doses than it needs.

<https://www.eurekastreet.com.au/article/vaccine-equity-and-the-intellectual-property-wars>

April, 2021

The enormous gap in vaccination rates is important not only because of the unfairness of the world's poor being left behind, but because of the risk the situation poses to the whole world. If the pandemic is allowed to spread unchecked through the developing world it is certain that we will see more mutations. It is very possible that some of these mutations may be more contagious and/or more deadly and more resistant to our current crop of vaccines.

https://www.cepr.net/patents-and-the-pandemic-can-we-learn-anything/?_cf_chl_jschl_tk__=pmd_86u5FEuyIPY2p6A9NFzEttP9Wzai6op.Sd6bUFn0nC4-1634713111-0-gqNtZGzNAmWjcnBszQnl

April, 2021

Rich countries have monopolized the world's supply of vaccines by pre-purchasing doses in bulk. By November 2020, 7.5 billion doses had been reserved, half of these by rich countries making up only 14% of the global population.

Rich countries have also under-invested in COVAX, the global program for equitably distributing vaccines. COVAX needs an additional US\$3.2 billion just to meet its target of vaccinating 20% of populations of participating countries.

<https://theconversation.com/over-700-health-experts-are-calling-for-urgent-action-to-expand-global-production-of-covid-vaccines-159701>

India's and South Africa's proposal

March, 2021

In October 2020, India and South Africa formulated a proposal waiving 'certain provisions of the TRIPS [Trade-Related Aspects of Intellectual Property Rights] agreement for the prevention, containment and treatment of COVID-19.' The waiver would apply to WTO members, enabling them to not apply or enforce certain provisions under Part II of the TRIPS Agreement, specifically section 1 (copyrights and related rights), 4 (industrial design), 5 (patents), and 7 (protection of undisclosed information). The General Council would agree on the duration of the waiver, at the very least maintaining it till widespread global vaccination had taken place, with the majority of the world's population rendered immune.

Australia, Brazil, Canada, EU, Japan, Norway, Switzerland, UK and the US were either formally opposed to the measure, or not in support of it.

<https://www.eurekastreet.com.au/article/vaccine-equity-and-the-intellectual-property-wars>

May, 2021

President Biden's trade representative announced that the US would be supporting a resolution at the World Trade Organization (WTO), to suspend intellectual property rules on vaccines for the duration of the pandemic.

<https://www.cepr.net/bidens-big-step-on-trips-getting-the-world-vaccinated/>

Patent problems

February, 2021

Patent protection increases prices and reduces access to medicines, diagnostics, vaccines, medical devices and personal protective equipment. Strategic behaviour aimed at blocking generic competition contributes to rising drug prices. Pharma firms routinely engage in 'evergreening' to extend patent protection terms. A firm may have a popular drug with an about-to-expire patent, and then offer a 'new' formulation—

from a tablet to a gel cap—of the same drug and obtain another 20 years of protection.

These practices disproportionately impact people in less affluent countries, e.g., during the HIV/AIDS pandemic in the late 1990s and early 2000s an estimated 12 million infected Africans were left to die, waiting for enough life-saving drugs to reach the continent even as patients in wealthier nations saw their death rates from HIV/AIDS plummet.

<https://www.salon.com/2021/02/28/how-patent-laws-are-hindering-the-fight-against-covid-19/>

March, 2021

In India Médecins Sans Frontières and Pfizer are arguing about the pneumococcal vaccine, protected by a patent preventing other vaccine manufacturers from manufacturing it till 2026. According to MSF, doing so deprived ‘children of the opportunity to be protected against pneumonia, which kills 2,500 kids a day.’

<https://www.eurekastreet.com.au/article/vaccine-equity-and-the-intellectual-property-wars>

April, 2021

In addition to the likelihood that research would advance more quickly if it were fully open, we would also have the advantage that we would take away the perverse incentives created by patent monopolies. When a drug or vaccine can sell for many thousand percent above the free market price due to a government-granted monopoly, we give companies an enormous incentive to lie about the safety and effectiveness of their products.

We saw this most dramatically with the opioid crisis. The leading manufacturers of the new generation of opioids paid billions in settlements based on the allegation that they deliberately misled doctors about the addictiveness of the new generation of opioids in order to maximize sales. They would have had little incentive to push their drugs so aggressively if they had been selling as cheap generics.

We have seen the same sort of issue in the pandemic where all the drug companies have been less transparent in sharing their clinical trial data. Most notably, Astra Zeneca was accused of cherry-picking results to inflate the reported effectiveness of its vaccine. More recently, the company insisted that there was no issue with its vaccines causing blood clots even though a number of young healthy people got blood clots, many of them fatal, shortly after receiving its vaccine.

When economists claim that technology is the cause of the growth in inequality over the last four decades, they actually mean that patent and copyright monopolies are the cause. These government-granted monopolies are what allowed a relatively small group of people to get a grossly disproportionate share of the benefits of new technologies. It wasn't the fault of the software or mRNA.

“To my view, there is no economic policy that is worse in its outcomes than our system of patent monopoly financing for prescription drugs.” Dean Baker, Center for Economic and Policy Research

https://www.cepr.net/patents-and-the-pandemic-can-we-learn-anything/?_cf_chl_jschl_tk_=pmd_86u5FEuyIPY2p6A9NFzEttP9Wzai6op.Sd6bUFn0nC4-1634713111-0-gqNtZGzNAmWjcnBszQnl

October, 2021

The TRIPS provisions of the WTO were designed to limit the spread of technology to the developing world. The India-South Africa resolution was intended to get around these.

<https://www.cepr.net/the-preventable-horrors-of-the-pandemic-and-the-short-case-for-open-research/>

When Jana Pittman became the ambassador for the Australian Cervical Cancer Foundation, she went on a trip to the Philippines to perform cervical screening tests. She was deeply moved by what she saw: Women who had not had access to the kind of test that she had had.

"A lot of these women had never seen a doctor, let alone had a gynaecology exam," Pittman says.

<https://www.abc.net.au/news/2021-11-01/jana-pittman-how-australia-s-golden-girl-continues-to-surprise/100525802>

September, 2021

We usually want as many people as possible to benefit in order to make the research worthwhile. If the treatments are going to be available only to selected individuals or particularly privileged individuals, then we have to worry about whether we should be doing it in the first place.

Dominique Martin, Associate Professor, Bioethics and Professionalism, Deakin University

<https://www.abc.net.au/radionational/programs/healthreport/avatars-+/13609548>

October, 2021

By my calculations, the higher cost due to patent monopolies and related protections comes to more than \$400 billion (1.8 percent of GDP) in the case of prescription drugs alone. If we add in the higher costs that we pay for medical equipment, computers, software, and a variety of other items, the burden likely comes to more than \$1 trillion a year, or 4.5 percent of GDP.

<https://cepr.net/high-drug-prices-and-the-refusal-to-talk-seriously-about-debt-and-deficits/>

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Research paid for by the public

December, 2020

The novel technology at the heart of the Moderna vaccine, for example, was developed partly by the National Institutes of Health using U.S. federal funds. Moderna then received a total of some \$2.5 billion in taxpayer money for research support and as preorders for vaccines; by the company's own admission, the \$1 billion contribution it received for research covered 100 percent of those costs.

Pfizer, for its part, received a \$455 million grant from the German government to develop its vaccine, and then, by our count, nearly \$6 billion in purchase commitments from the United States and the European Union.

AstraZeneca benefited from some public funding while it was developing its vaccine, and received a total of more than \$2 billion from the United States and the European Union for both research and in purchase commitments. It also signed a deal worth \$750 million to supply the Coalition for Epidemic Preparedness Innovations and Gavi, the Vaccine Alliance, with a total of 300 million doses.

In other words, the vaccines developed by these companies were developed thanks wholly or partly to taxpayer money. Those vaccines essentially belong to the people — and yet **the people are about to pay for them again.**

<https://www.nytimes.com/2020/12/07/opinion/covid-vaccines-patents.html>

April, 2021

Earlier this month New York Times ran a piece on Katalin Kariko, one the heroes in the development of mRNA technology, who spent her career going from lab to lab where she was supported by government grants. According to the piece, she never made more than \$60,000 a year.

This was the sort of work that created the basis for the developments of the vaccines shortly after the pandemic was recognized. The scientists at both Moderna and Pfizer (and its German partner BioNtech) have boasted about how they were able to develop the vaccines now being distributed in a matter of days after getting the genome for the coronavirus. These companies claim that this success was possible only because of years of prior research. That claim is true, but most of the key research was on the taxpayers' dime, not out of the pockets of these companies.

In addition to the years in which the NIH supported the development of mRNA technology, we had the one-time influx of \$10 billion in public funding through Operation Warp Speed (OWS).

https://www.cepr.net/patents-and-the-pandemic-can-we-learn-anything/?_cf_chl_jschl_tk_=pmd_86u5FEuyIPY2p6A9NFzEttP9Wzai6op.Sd6bUFn0nC4-1634713111-0-gqNtZGzNAmWjcnBszQnl

May, 2021

In the case of the Moderna vaccine, the government picked up the full tab for the development costs.

<https://www.cepr.net/bidens-big-step-on-trips-getting-the-world-vaccinated/>

Massive profits for Big Pharma

April, 2021

Pfizer and Moderna expect to generate US\$15 billion and US\$18.4 billion in revenue respectively in 2021, just based on existing supply agreements.

The People's Vaccine Alliance estimates Pfizer, Johnson & Johnson and AstraZeneca have distributed US\$26 billion to their shareholders in the form of dividends and stock buybacks in the past 12 months - enough to cover the cost of vaccinating 1.3 billion people.

<https://theconversation.com/over-700-health-experts-are-calling-for-urgent-action-to-expand-global-production-of-covid-vaccines-159701>

April, 2021

The shareholders and top scientists at Moderna, Pfizer, and the other leading manufacturers stand to make billions that will come out of the pockets of the rest of us. The amount of money transferred to the drug industry alone through patent monopolies and related protections is close to \$400 billion a year.

https://www.cepr.net/patents-and-the-pandemic-can-we-learn-anything/?_cf_chl_jschl_tk__=pmd_86u5FEuyIPY2p6A9NFzEttP9Wzai6op.Sd6bUFn0nC4-1634713111-0-gqNtZGzNAmWjcnBszQnl

May, 2021

Pfizer made \$3.5bn on its vaccine in the first quarter of 2021 alone

<https://www.theguardian.com/commentisfree/2021/may/07/biden-covid-vaccine-patents-not-enough>

March, 2021

Pfizer Inc. paid Chief Executive Officer Albert Bourla \$21 million in total compensation last year. The overall pay package, which included salary, bonus, stock and other incentive pay, represented a 17% increase from Bourla's compensation in 2019.

<https://www.bloomberg.com/news/articles/2021-03-12/pfizer-ceo-bourla-s-pay-climbed-17-to-21-million-in-2020>

Scientists trying to patent methods for editing human embryos

May, 2021

Two prominent groups of scientists, and two major American universities, are trying to patent methods for editing human embryos, with reproductive use clearly intended. One patenting effort is headed by Shoukhrat Mitalipov at Oregon Health & Science University, the other by Dietrich Egli at Columbia University in New York.

<https://www.gmwatch.org/en/news/latest-news/19810-scientists-and-two-major-american-universities-are-trying-to-patent-methods-for-editing-human-embryos>

Editor: If this is allowed, where will the editing of human embryos lead? Workers who are suited to the difficult, dangerous and dirty jobs most of us don't want to do. Super soldiers who don't feel fear or pain. Sex slaves who are anxious to please, submissive, and can't become pregnant.

Increasing number of patents on food plants and New GE

June, 2021

Testbiotech has published a new report showing the increasing number of patent applications being filed and granted in Europe on so-called gene scissors (new genetic engineering, New GE).

Furthermore, many of the patents currently being filed intentionally try to blur the fundamental biological and technical differences between genetic engineering and conventional breeding. The purpose is to expand patent monopolies into the non-technical areas of traditional breeding that are excluded from patenting. This can have major consequences for the functioning of the European market in plant and animal breeding.

<https://www.gmwatch.org/en/news/latest-news/19828-increasing-number-of-patents-on-food-plants-and-new-ge>

As scientists move closer to making part human, part animal organisms, what are the concerns?

April, 2021

Scientists have made human-monkey embryos and cultured them in the lab for two weeks. Human stem cells were placed inside six-day-old monkey embryos created by fertilization. The human-monkey embryos comprised mostly of monkey cells and some human cells.

The researchers were interested in addressing the shortage of life-saving organs for human transplantation. If done successfully, a chimera could grow an organ suitable for direct transplant into a human.

Human-animal chimera research does raise ethical questions. Human-animal chimeras are neither fully human nor fully non-human.

Should be allowed to use them as a source of transplantable organs, in harmful research, or for other purposes we wouldn't use humans for.

These concerns will be most acute for chimeras with human-like brains, wherein human cells are incorporated into an animal's brain during development. If a human-pig chimera developed a capacity for autonomy, rationality and sophisticated self-awareness, it may have a moral claim to be treated more like a human than a pig.

The study raises a second ethical concern that is more immediately relevant. Using recent advances in monkey-embryo culture, the researchers cultured some embryos until 19 days post-fertilisation.

Many jurisdictions explicitly limit human embryo research to the first 14 days of development, when what will become the central nervous system begins to develop.

Should the 14-day limit also apply to human-animal chimeric embryos?

<https://theconversation.com/as-scientists-move-closer-to-making-part-human-part-animal-organisms-what-are-the-concerns-159049>

The African Centre for Biodiversity GMO report

October, 2020

First generation GMOs have failed to fulfill any of the grand promises made, including tackling hunger, increasing food security and farmer income, and supporting farmer livelihoods. The contrary has been experienced in South Africa, the only country on the continent to commercialize a GM cereal staple crop-maize. The nation is suffering escalating hunger, displacement of traditional and local seed and crop failures, at least in part due to ineffective GMO strategies.

The idea that we need to rush through legislation to allow for 'revolutionary' products to enter markets is not borne out by evidence of either the safety or efficacy of genome editing to generate useful traits. Genome editing and other new GE techniques are far from revolutionary. Evidence suggests that their commercialization serves little more than to reinvigorate a failing model of corporatized industrial agriculture. As the world becomes aware of the devastating effects of this expansion on human and planetary health, we call for a clean break-away from the continuation of this model, a rejection of this new technology and a move towards an equitable, safe and sustainable food system for all.

The African Centre for Biodiversity, South Africa

https://www.acbio.org.za/sites/default/files/documents/202010/genome-editing-next-gm-techno-fix-doomed-fail-regulatory-issues-and-threats-africa_0.pdf

Wise stance on deep sea mining

April, 2021

A long-running dispute over plans to start mining the ocean floor has suddenly flared up. The concept is to extract billions of potato-sized rocks called nodules that are rich in valuable minerals from the abyssal plains of the oceans several miles deep.

Claudia Becker, a senior BMW expert in sustainable supply chains, explains what led the car giant to decide against using deep sea metals. "It's the fear that everything we do down there could have irreversible consequences," she said.

"Those nodules grew over millions of years and if we take them out now, we don't understand how many species depend on them - what does this mean for the beginning of our food chain? "There's way too little evidence, the research is just starting, it's too big a risk." "With mines on land we do understand the consequences and we do have solutions but in the deep ocean we don't even have the tools to assess them."

<https://www.bbc.com/news/science-environment-56607700>