



Expert Warns 5G Could Cause Cancer In Humans

The health concerns over 5G may or may not be justified in the end, but the industry's refusal to permit adequate testing and release of existing data is reprehensible. In the meantime, 5G is the great enabler of Technocracy. □ TN Editor

Superfast broadband could be a global catastrophe, kill wildlife, give people terminal diseases and cause the Earth's magnetic field to change, according to shock claims by a technology expert.

Arthur Robert Firstenberg is an American author and activist on electromagnetic radiation and health.

He founded the independent campaign group the Cellular Phone Task Force and since 1996 he has argued in numerous publications that wireless technology is dangerous.

In his 1997 book *Microwaving Our Planet: The Environmental Impact of the Wireless Revolution*, he claimed: "The telecommunications industry

has suppressed damaging evidence about its technology since at least 1927.”

He has recently started an online petition calling on world organisations, such as the UN, World Health Organisation (WHO), and EU to “urgently halt the development of 5G” - which is due to be rolled out this year.

Speaking to the Daily Star Online, he explained: “There is about to be as many as 20,000 satellites in the atmosphere.

“The FCC approved Elon Musk’s project for 12,000 satellites in November 15th and he’s going to launch his in mid-2019.

“I’m getting reports from various parts of the world that [5G](#) antennas are being erected all over and people are already getting sick from what’s there now and the insect population is getting affected.

“This could become a global catastrophe. When the first satellites were launched in the late 1990s for mobile phones, on the day they were launched people sensitive to these things got very sick.

“The mortality rate rose in the US by 5-10% too and there were reports that birds were not flying.

“People who realised this the most were pigeon racers who released their birds who then didn’t return.

“And that was for only 77 satellites, so we are very frightened at the prospect of 20,000.”

According to the Firstenberg, wireless networks are “harmful for humans” and the development of the next generation is “defined as a crime” under international law - he states in the online petition.

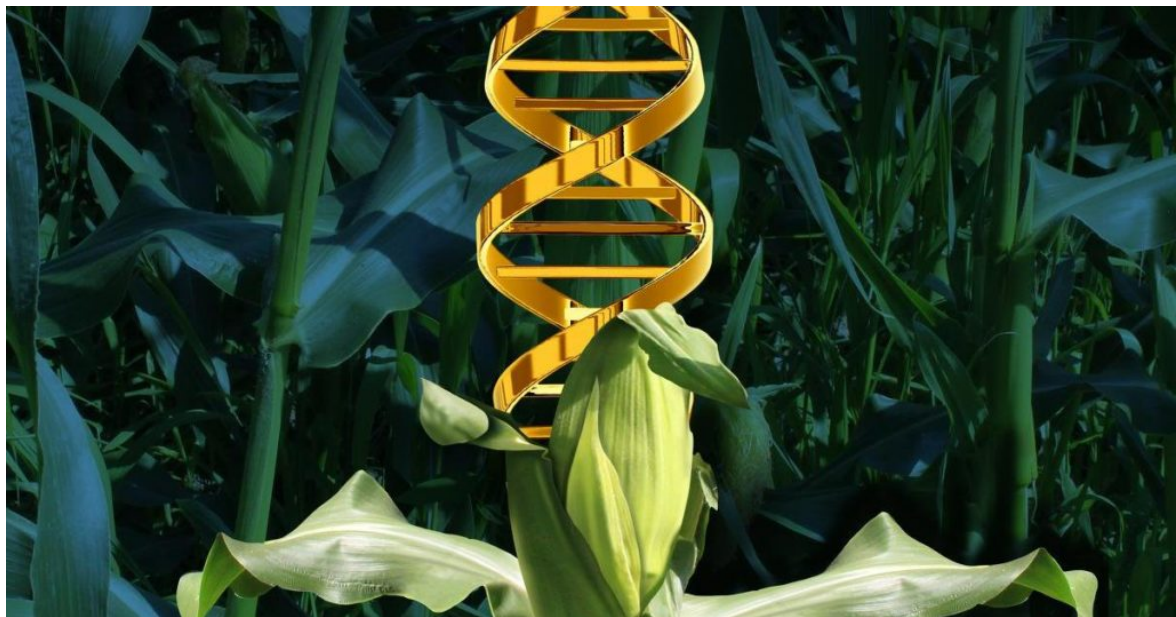
The petition adds: “[5G](#) will massively increase exposure to radio frequency (RF) radiation on top of the 2G, 3G and 4G networks for telecommunications already in place.

“RF radiation has been proven harmful for humans and the environment. The deployment of 5G constitutes an experiment on humanity and the

environment that is defined as a crime under international law.

“Despite widespread denial, the evidence that radio frequency (RF) radiation is harmful to life is already overwhelming. The accumulated clinical evidence of sick and injured human beings, experimental evidence of damage to DNA, cells and organ systems in a wide variety of plants and animals, and epidemiological evidence that the major diseases of modern civilization—cancer, heart disease and diabetes—are in large part caused by electromagnetic pollution, forms a literature base of well over 10,000 peer-reviewed studies.”

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CRISPR Gene Editing Toolbox Is Expanding

There is an arms race of sorts as genetic scientists ‘scour the planet’ for alternatives to standard CRISPR technology. As it gathers steam, editing the human genome will prove to be the scourge of humanity. □ TN Editor
The gene-editing tool that has revolutionized biology is becoming even more powerful.

CRISPR, as the system is known, allows scientists to target and snip a specific sequence of letters on a strand of DNA with unprecedented precision. That has opened up new possibilities for treating genetic diseases, helping plants adapt to global warming and even preventing mosquitoes from spreading malaria.

CRISPR is made up of two basic components. The first is a piece of RNA that locates a predetermined sequence of DNA in an organism's genome that scientists want to alter. The second is a type of protein called an enzyme that attaches itself to the target section of DNA and splices it.

Cas9 has been the workhorse enzyme because it executes a neat, blunt cut. But in the last few years, scientists have started to search for — and find — alternative CRISPR systems that cut with enzymes other than Cas9.

“Cas9 is a powerful tool, but it has limitations,” said CRISPR pioneer Feng Zhang, a bioengineer at MIT and the Broad Institute. “Each of these proteins has shortcomings and strengths, and together they help us create a much more versatile box of tools.”

Some of the new Cas enzymes cut DNA in different ways that make certain edits more likely to work. Other enzymes are smaller, allowing scientists to more easily insert them into cells.

“The diversity of CRISPR proteins is exceptionally broad,” said Benjamin Oakes, an entrepreneurial fellow at the Innovative Genomics Institute, a joint project of the University of California, Berkeley and the University of California, San Francisco. “They have been evolving over millennia and nature has developed hundreds, if not thousands, that can work.”

In nature, bacteria use this technology as a defense mechanism to find and destroy attacking viruses.

Bacteria store sequences of viral DNA within their own DNA, bookended by a repeating sequence of letters. Hence the system's name CRISPR, which stands for Clustered Regularly Interspaced Short Palindromic Repeats. (The first CRISPR systems discovered were indeed partly palindromic, however scientists later found that that this is not

universally true.)

CRISPR-Cas9 has already proved to be an exceedingly useful tool for a wide variety of genetic tinkering, including turning genes on and off, disabling them entirely, introducing new DNA into a genome, and deleting DNA you don't want.

But scientists wondered what other CRISPR enzymes might bring to the genetic editing table.

CRISPR-Cas12a was the first system after CRISPR-Cas9 to be used for gene editing in the lab. A recent study on Cas12a's cousin Cas12b demonstrated that this variant could edit the human genome as well, giving scientists yet another tool to tackle genetic diseases.

Other work has shed light on a suite of additional promising CRISPR enzymes, including Cas13, Cas14 and CasY. The latest candidate, CasX, was described in detail Monday in a study by Oakes and others in the journal Nature.

Comparing CRISPR systems is a bit like comparing fruits, Zhang said. If Cas9 enzymes are apples, then Cas12 enzymes might be plums — still edible and delicious, but also totally different.

And like fruit, these different systems have variations within them. Just like there are subspecies of plums, there is also a wide variety of Cas12 enzymes.

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Big Hotel Chains Become Arms Of Surveillance State

The Department of Homeland Security has penetrated large hotel chains to extend the Fed's surveillance network to include unsuspecting travelers and especially women. Aside from rank discrimination, this is an ominous warning for all private industry. □ TN Editor

When a tweet accused Marriott Hotels of “working with the feds and keeping [an] eye on any women who are traveling alone,” training staff to “spot an escort,” and “not allowing some women [to] drink at the bar alone,” Marriott’s official account proudly confirmed the observation: “You are correct. Marriott employees all over the world are being trained to help spot sex trafficking at our hotels.”

The brief Twitter exchange, which occurred in January, revealed some of the hidden presumptions behind Marriott’s efforts to stop sexual exploitation. Not only did it suggest that the company conflates all sex work with forced or underage prostitution, but it also hinted the world’s largest hotel chain considers all unaccompanied women to be worth

monitoring—or, at the very least, that there’s confusion about this among staff.

After many on Twitter responded that they didn’t believe the policy would be non-discriminatory or effective at stopping sex trafficking, Marriott deleted the tweet without explanation. A spokesperson for the company later told *Reason* that the tweet was “inaccurate” and that “there is nothing in the training that advises hotel workers to look for young women traveling alone,” while crediting the company’s training program for removing young people from “dangerous situations.” Rep. Justin Amash (R-Mich.) [tweeted](#) that his office would be looking into the incident.

But the deserved dustup points to a much bigger issue than unusually watchful hotel staff. It’s part of a Homeland Security-backed coalition using human-trafficking myths and War on Terror tactics to encourage citizen spying and the [development](#) of new digital surveillance tools.

However well-intentioned, the surveillance tactics that have been adopted by hotel chains are part of a disturbing partnership between hospitality businesses, federal law enforcement, and rent-seeking nonprofits that increasingly seeks to track the movements and whereabouts of people, especially women, all over the country. Under pressure from the federal government and driven by persistent myths about the nature and prevalence of sex trafficking, hotel chains like Marriott have become the new frontiers of the surveillance state. Like the indiscriminate spying campaigns that grew out of the 9/11 attacks, it’s an effort based on panic, profiling, and stereotypes, and it is nearly certain to ensnare more innocents than it helps.

Carceral Hospitality

For years, the federal government has funded partnerships with hotels, airlines, truckers, and other public-facing industries under the mantle of stopping human trafficking and sexual exploitation. In theory, this partnership puts the private sector on the frontlines of rooting out abuse.

In practice, however, these efforts have largely wound up as law-enforcement-driven attacks on sex workers and their clients, on immigrants, and on other members of marginalized communities. Along the way, victims of actual trafficking are often swept up in the arrests and incarceration.

Many of these efforts fall under the purview of the Department of Homeland Security (DHS) “Blue Campaign,” which has been in place since 2010. Promoted as a way to help hotel and transit staff, hospitality businesses, and travelers “recognize the signs” of human trafficking, the Blue Campaign is best understood as an update to the war-on-terror surveillance systems developed under the George W. Bush administration. It relies on tactics adapted from [“If You See Something, Say Something,”](#) or S4, a campaign run by DHS that stems from New York City’s turn-of-last-century subway slogans.

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