

Design of a Weapon: Targeting the Human Microbiome

"Biodefense in the Age of Synthetic Biology"



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2023-04-10

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In this article I am using excerpts from the textbook: [“Biodefense in the Age of Synthetic Biology”](#) published by the NIH in 2018.

National Academies of Sciences, Engineering, and Medicine; Division on Earth and Life Studies; Board on Life Sciences; Board on Chemical Sciences and Technology; Committee on Strategies for Identifying and Addressing Potential Biodefense Vulnerabilities Posed by Synthetic Biology.

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This material should be read in conjunction with my discussion with Dr. Hazan and associated musings on microbiome and its vital role in human health:

Due Diligence and Art

Conversation with Dr. Sabine Hazan + my own thoughts on Ralph Baric, FDA and other pathogens

Watch now (66 min) | Trigger warnings: Welcome to Gastroenterology! We talk shit! We use the word "virus" (gasp!) - listen to what we mean by that, and read the post below before writing angry comments, which I will ignore anyway. Learn more about Dr. Hazan, her work, publications and ongoing clinical trials on her web page at...

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Quotes below are from the NIH “Biodefense” textbook (emphasis mine):

Human health is highly dependent upon the human microbiome—the microorganisms that live on and within us, especially those associated with the gut, oral cavity, nasopharyngeal space, and skin. These populations of microbes are likely far easier to manipulate than the human host itself, making the microbiome a potentially accessible vector for attack. The human microbiome is the focus of a great deal of academic and commercial research, and microbiome manipulation is an area that is rapidly developing[...]. Several possible ways the microbiome could be manipulated to cause harm were considered; these possibilities were analyzed, in aggregate, to determine the level of concern warranted.

Delivery of harmful cargo via the microbiome. [...] the engineering of microorganisms to produce hazardous chemicals or biochemicals (including toxins) poses [...] the potential for making chemicals or biochemicals in situ via the microbiome [and] warrants a high level of concern. **The microbiome could be used as a vector for other types of harmful cargoes, as well.**

For example, microbes could be modified to produce functional small RNAs (e.g., microRNAs [miRNAs]) that could be transferred to the host via the gut or skin microbiome to cause a variety of health impacts. Microbes also could potentially be engineered to horizontally transfer a genetic cargo to the native microbiome to, for example, cause a host's own well-established microbes to produce a harmful biochemical.

Note that while the book says “modifying” microbiome, I do not believe any functional modifications are possible. They are talking about killing and injuring the beneficial microbes, as an easier way to attack the human body.

I believe the highlighted part above explains the operating principles behind weaponizable synthetic DNA/RNA material which was designed to induce “covid” illness in population via deliberate deployment. More about these mechanisms discussed below, including the #Plasmidgate - results of sequencing plasmid DNA from vials of Pfizer and Moderna by Kevin McKernan.

Notice the use of **small** RNAs, i.e., using inherent RNA instability and propensity to shatter to produce desired harmful cargoes as weaponized payload. Continuing with the book

chapter, it explains the main obstacle to microbiome weaponization - the healthy microbiome of course! Healthy microbiome already occupies all the available space in the body while the weaponized material needs to be transferred to enough members of the species to be effective:

In such a scenario the harmful agent would be manufactured by organisms in the established microbiome, so the engineered microbe would need to infiltrate and persist within the microbiome only long enough to transfer its cargo to a sufficient number of native microbes. Thus, this approach would circumvent the challenges associated with establishing engineered microbes in otherwise occupied niches. There are many known instances of natural horizontal transfer events that result in the production of toxins ([Kaper et al., 2004](#); [Strauch et al., 2008](#); [Khalil et al., 2016](#)). It may be possible to harm a population by enhancing the spread of vectors or phage (viruses targeting bacteria [[Krishnamurthy et al., 2016](#)]) carrying such genetic cargoes. Synthetic biology methods could advance such a capability, for example, through the engineering of toxin:antitoxin couples that would help ensure retention of plasmids. It is also conceivable that microbes could one day be engineered to horizontally transfer genes directly to human cells.

The textbook chapter further describes potential delivery mechanisms via adulterated pet food for example. They are coy about this being applicable to **only** pet food. Does injecting cattle with mRNA make more sense now?

Use of the microbiome to increase the impact of an attack. The microbiome can also potentially be exploited to design a more effective bioweapon or increase the impact of an attack. Knowledge of the human microbiome could be used to modify pathogens or their delivery mechanisms to allow more efficient propagation within or between populations, for example, by taking advantage of the frequent exchange of bacteria between humans and animals. In particular, domestic animals could be used as carriers for engineered agents transmitted via the microbiome. For example, engineered dog or cat microbiomes could be established via adulterated feedstocks or via purposeful contamination of populations in animal shelters or pet stores and then subsequently transmitted to humans. Natural transfers resulting from animal-human contact, such as the transfer of the parasite *Toxoplasma gondii* from cats to humans and the transfer of *Campylobacter* from dogs to humans, illustrate the feasibility of this approach ([Jochem,](#)

[2017](#)). Similarly, research into the role of the microbiome in pathogenesis could provide a roadmap as to how to generate improved pathogens that are better supported by their microbial peers. Studies involving wide-ranging transposon- or CRISPR-based deletion libraries of pathogens ([Barquist et al., 2013](#)) have provided many insights into pathogenesis that might have dual-use implications, and such libraries could prove useful in identifying which genes productively or specifically interact with endogenous flora to better establish a pathogen.

Hijacking of microbiome can be used to spread toxins and further damage microbiomes of the population by **engineered dysbiosis**:

In addition to using the microbiome to spread toxins and pathogens, manipulating the microbiome might also prove to be a useful adjunct for other biological threats. Recent research shows, for example, that eukaryotic viruses utilize bacteria to improve their chances of infection ([Kuss et al., 2011](#)). It is also conceivable that an actor could introduce an initial agent into a population in order to trigger widespread treatment with broad-spectrum antibiotics and then take advantage of the treated population's "clean slate" to introduce or expand an engineered organism via the (now disrupted) microbiome. An actor taking this two-step approach could even incorporate antibiotic or antiviral resistance elements into the initial attack.

Engineered dysbiosis. Our ever-increasing understanding of the human microbiome may lead to opportunities for engineered dysbiosis—that is, the purposeful perturbation of the normally healthy microbiome. This could be accomplished either by causing a known dysbiosis or engineering a new one, and in either case would likely involve introducing otherwise nonpathogenic microorganisms that then lead to diminutions in human health and performance. Since the microbiome likely plays a key role in human immunity ([Kau et al., 2011](#)), dysbioses could also potentially be used to cause longer-term debilitation of a population's ability to defend against disease. Gut, oral, nasal, and skin microbiomes could be targets for such an approach. The degradation of military readiness due to continued operations in harsh climates is an ongoing issue. This situation could be made much worse by targeted additions to or alterations of the skin microbiome that lead to heightened chafing, rashes, windburn, and itchiness. While these are seemingly minor concerns, over time they could degrade military capabilities to the point of impacting readiness.

And, when you inject someone with a microbiome damaging substance marketed as “Covid-19 vaccines” the weapon works as designed! The microbiome gets destroyed, even in newborns from vaxxed mothers during pregnancy:

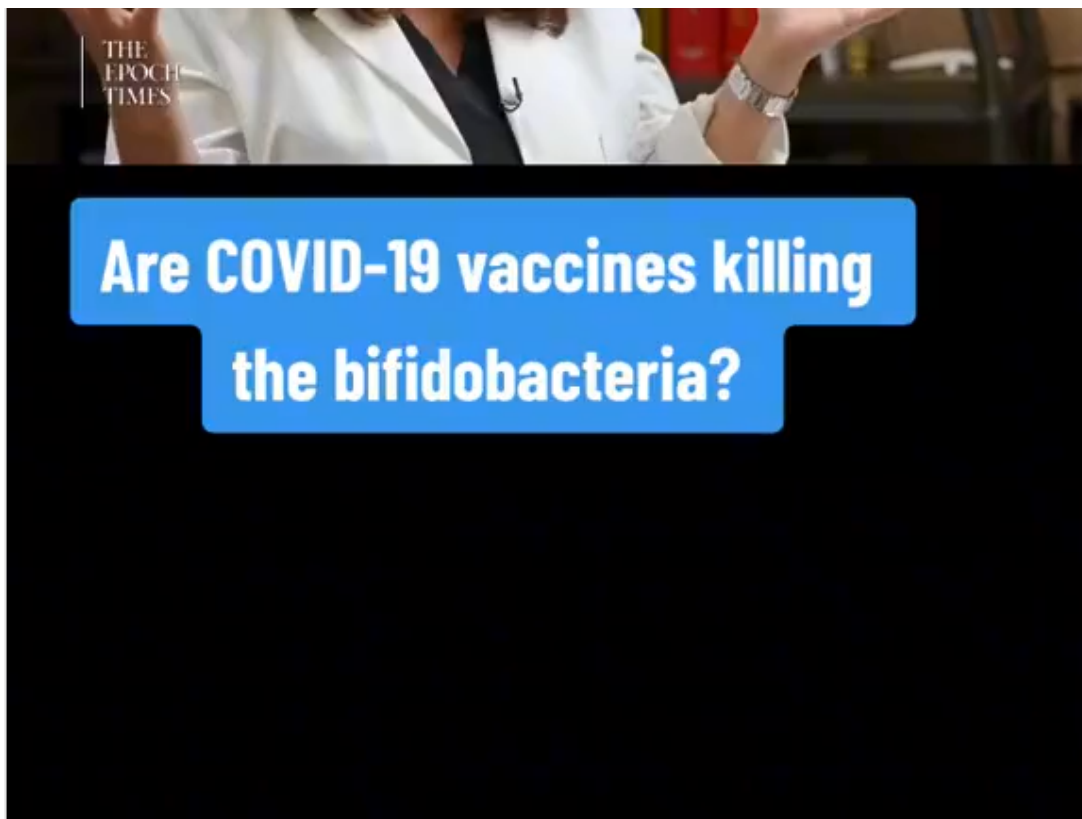


sabine hazan md
@SabinehazanMD

This tik tok had close to \$1 million views last night and over 25k retweets and, in 24 hours, was pulled down @JanJekielek Do we still believe this is about a virus? They who want to control don't want you to make discoveries. I tried to repost it, and it says " under review" <https://t.co/3CGcWfljpZ>

"We followed them for 90 days...Their bifidobacteria dropped to like zero—from like a million to like zero."





4:52 AM • Mar 26, 2023

38Likes23Retweets

Here is what is currently definitively proven by Kevin McKernan's sequencing of Pfizer and Moderna vials. Kevin's own writing is highly technical and difficult for lay audience, so I am quoting here from an excellent "human language translation" by the ["Very Slow Thinking"](#) substack. Please make sure to subscribe to this stack to show appreciation!

Emphasis mine:

Let's recap and combine what McKernan has found with what he knows from broader research.

- The shots contain dsDNA (circular and linearized) plasmid contaminants that are replication competent in human cells and bacterial cells, antibiotic resistant and carry the spike protein coding.
- Moderna samples were initially estimated to conform to the EMA's contaminant limit (1:3000). Pfizer's did not, by an order of magnitude (1:350).

- The plasmids are an undesired artefact of the industrial manufacturing process of the mRNA payload, which raises questions about the manufacturing process quality control, assurance and oversight, specifically around purification of the mRNA payload from the engineered E.Coli and the plasmids they contain.
- The formulation of the Covid gene therapies comprises the LNP components, the mRNA payload and the dsDNA plasmid contaminant.
- At working temperature, the LNP components self-form into “lipid wrappers” that encapsulate, protect and deliver the mRNA, but have the potential capability to do the same for the dsDNA plasmid contaminant.
- The host/patient could be receiving a combination of:
 - mRNA payload with a capacity to produce an intended amount of spike protein; plus
 - **an unintended and unknown amount of dsDNA plasmid with a capability to radically replicate itself inside the host’s cells and also inside bacterial cells inside the host’s own gut microbiome, should the plasmids make it into the host gut.**
- Per available manufacturer biodistribution studies, it is now known that LNPs build up in the intestines over the observed initial 48 hours post injection, implying that should LNPs encapsulate the dsDNA plasmid contaminant, **the LNPs will carry it into the host gut and provide access to the bacteria there.**
- Should this occur, the host could experience a radical increase of plasmid burden as it replicates in the gut, with unknown effect. In order to stop the replication, a logical step would involve using antibiotics to kill the plasmids and the host bacteria in the gut. **Trouble is, the plasmid is antibiotic resistant by design and may survive (“the selection of neomycin and kanamycin resistant bacteria in the gut microbiome”).**

So, here we have it all: the mechanism of weaponization of the mRNA/DNA "injections" is the same or largely similar to what is described in books on weaponizable biotechnologies: transfection of cells by delivery of RNA + “DNA contaminants” into the cells and induction of dysbiosis, which will in turn cause cascades of many chronic illnesses. This mechanism is now confirmed to be included in Pfizer and Moderna vials by direct testing with sequencing techniques by a highly experienced genomics scientist.

If we look at the seasonal respiratory illnesses as being initiated by imbalances of microbiome, and their symptoms (fever, cough, congestion, etc) as “healing crises” - body’s way of trying to re-establish the balance, then a bioweapon would need to be able to trigger the microbiome imbalance in large numbers of people. I am getting more convinced that this is what happened with “covid”. It was a way to trigger microbiome imbalances (with some unusual symptoms) by deploying large quantities of cloned purified RNA materials in the environment which would be picked up by inhalation/ingestion or perhaps transdermally. They would only last for a short period of time before degrading as RNA clones do not replicate and do not have cellular machinery to maintain themselves. These are not living organisms, they are simply genetic “spam mail” messages that all living things combat and try to get rid of. Since this material was cloned (purified), it would produce just enough consistent signature on (highly upcycled and manipulated) PCR and thus appear as a “new virus” for purposes of lying to the public about the existence of a viral pandemic. The lockdown, stress, fear, and especially masking (oxidative stress) were all the ways to lower the immune system defenses and ensure that more people would be affected by this attack. So, all of this together makes sense and shows a very clear pre-planned intent to harm.

Art for today: [Sunflowers in a Blue Pitcher](#), oil on panel 12x16 in.

