

## Universal Vaccines: Science is Shifting to One for Many Opinions Overview Composition

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### Foreword

Did you have a moment last week where you breathed a sigh of relief, saying, "we passed the big hurdle"?

"I do not think we went through it, I think we are in a truce. I hope it is a truce that will continue and that the war will end. However, we are still in the roaring of the battle. Many threats are coming from outside and can develop here. More than a third of the country So it's not behind us, it's not that everything has passed. "

The chief of the public health services at the Israeli Ministry of Health, who said yesterday that the "plague is on the wane", clarified in an interview with Ynet: "There are hundreds verified every day, and 37% of the population is not vaccinated. "Take care!" On vaccines for children, she said: "There are discussions, even after FDA approval it will not be automatic." Eliminate masking outside? There is still no line.

Although the COVID-19 epidemic has passed the world in surprise, with many still debating how drastic the world has changed, scientists and global health Experts expected something like this Years. President Obama warned the United States to prepare for a return to schedule in 2014, Bill Gates, and many others warned the world of the impending global pandemic caused by viruses. They demanded that the scientific, industrial, and economic should prepare, some research is done but in low gear, too slowly as we experience today. [1] and more against the outbreak of a virus epidemic. But did not devote the full energy and means to its preparation. And here it happens. The leaders brag that they can stop the virus. But they fail next in these battles. Stage fighting the virus. Coronaviruses are notorious for their flow from Animals to humans. Given the outbreaks of SARS In 2002 (massively) and MERS-CoV in 2012 (starting in Camels). Researchers have long been calling the biotechnological, the scientific, and industrial systems. It is needed to develop an anti-coronavirus vaccine - Such a shield against all forms of coronavirus. One of the reasons it could have been the produced vaccines for COVID-19 so fast because of advances in technology, such as the RNA-based currently applied mRNA vaccination.

COVID-19 is a very complex disease. The virus that causes COVID-19 attacks the body in many different ways, ranging from mild to life-threatening. Body functions are damaged. A variety of organs and tissues of the body can be affected, including the blood. Robert Brodsky, a hematologist who runs the Department of Hematology, and Phnagis Gliatus, an expert in lung disease and critical care, talk about blood problems related to SARS-CoV-2 - the coronary virus that causes COVID-19 - and what you need to know: The effect of blood clots on the coronavirus the whole bpdy the body In addition to the respiration organs, the lungs, blood clots, including those associated with COVID-19, can also become harmful [2]:

The nervous system. Formation of blood clots in the arteries leading to the brain can cause a stroke. Some young and healthy people in the past who developed COVID-19 have had a stroke, possibly due to abnormal blood clotting. The kidneys. Blockage of the blood vessels in the kidney, with blood clots, leads to kidney failure. ThiS can also complicate dialysis if the clots clog the "machine filter" designed to remove infections in the blood. Peripheral blood vessels and "COVID toe". Small blood clots can close in the tinyes blood vessels. When this happens, close to the skin, it can cause a rash. Some people who tested positive for COVID-19 develop tiny blood clots that cause reddish or purple areas on the toes [3].



Measles-like bumps on the foot of a patient with COVID-19: Dermatologists have seen bumps that look like measles on the chest, back and other areas of patients with COVID-19

which can disintegrate or hurt. Sometimes called the COVID toe, the rash is similar to cold sores. 1. COVID-19, Blood and Immunity: A Way of Treatment? Sign up now 2. What about coronary heart disease and people with sickle cell disease? 3. Is it possible to spread coronary heart disease through blood? Can mosquitoes transmit the coronary virus? 4. Can you donate blood if you have had coronary heart disease? 5. Do certain types of blood carry a higher risk of coronary heart disease? [4]

What is a vaccine? Infectious diseases cause many deaths worldwide, and their clinical management is often impaired due to the emergence of multifunctional strains. Therefore, vaccine prevention is currently the best way to beat them. A vaccine is a biological substance that provides active acquired immunity to uncommon diseases. A vaccine usually contains a substance similar to the microorganism that causes the disease. It is sometimes produced from killed or weakened forms of a bacterium, toxins, or the surface proteins. The body's immune system is stimulated to recognize the agent as a threat and destroy it, and any of the microorganisms it encounters later.

Type of vaccines Vaccines can be prophylactic (e.g., to prevent or reduce the effect of future inflammation and infection by a pathogen), or therapeutic (e.g., cancer vaccines researched). Vaccines exist in many different forms, containing a live, attenuated virus, or an inactive microorganism, or some unique molecular component of the organism that causes the disease. Vaccines can usually be classified as follows: live attenuated vaccine, inactive vaccine, subunit vaccine, vector vaccine, conjugated vaccine, DNA and RNA vaccine, and more.[5]

### Majour technologies for vaccines

- *n Silico* Vaccine Design
- Live Attenuated and Killed Vaccine Design
- Subunit Vaccine Design
- Monoclonal Antibody Vaccines
- Total Synthetic Vaccine Design
- DNA and RNA Vaccine Design
- Viral Vector Vaccine Design
- Hapten Conjugate Vaccine Design
- Cell Based Vaccines
- Vaccine Target Validation

- Virus-Like Particles Based Vaccines
- Plant-based Vaccines

**A Major target for Covid infection in the brain. Brain Damage may result in cessation of the interoception and finally to death.[6]**

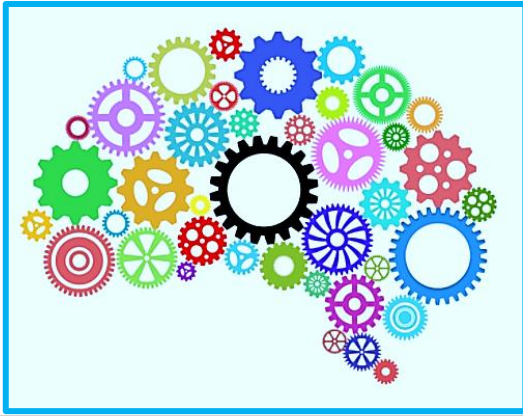


Cartoon depicting integrated function of the brain

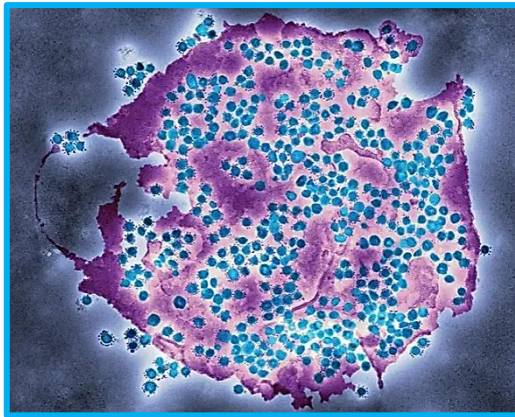
Everyone knows that currently, humans are doing a pretty bad job. Right now, in solving our most challenging problems of the Century. (Enter the topic of your choice ... for example, climate change, global poverty, nature protection, antibiotic abuse, armed conflict, economic stability, or No matter what).

On the other hand we know that 'evolving reflexes' humans do a very good job of protecting us from fast-moving objects, preventing us from falling from heights or cutting or burning ourselves, warming up to solid objects or being bitten by snakes. Or eat food that has disappeared. So if these two things are true (i.e. we succeed with issues where we have explicitly developed behaviors to guide us, but we fail at other issues where there seems to be no built-in behavioral response), then it seems we can draw a very clear conclusion that we do not have the right brain type for the century. -21. Well, if this is right we are in a real pickle.

**The first universal coronavirus vaccine will start human trials this year[7]**



All brain functions are geared normally. In case of interoception, this geared property is lost.



Immune cell swallows virus

The coronavirus that is spreading around the world is not the first to jump into humans, and it seems that it will not be the last. SARS-CoV-2 vaccines have been developed in record time and are functioning well.

However, now we urgently need a different kind of vaccine, scientists say: one that will protect us from other coronaviruses, even those we have not yet encountered.

This is a daunting challenge, and yet, work has already begun on creating such a novel "universal vaccine". The first human trials of potential candidates planned to begin later this year. [8]

Many zoonotic diseases have killed and are still killing today in humans, vaccines found in both humans and animals. It is primarily known for rabies, which is transmitted to many animals, including wolves and cats and dogs and bats. It is a viral disease that causes brain damage and [9] ends, with the vanishing of the brain's way to operate the living (life) of the body, the INTEROCEPTION (*It encompasses the brain's process of integrating signals relayed from the body into specific subregion*), as a cause of death. Today, humanity is facing a new zoonotic disease, COVID-19, which is raging worldwide. Several effective vaccines have now been discovered for this disease but only partially halted because the child population is not approved for vaccination at this stage. [10]

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### What is an interaction? Eighth sensory system

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Until a few years ago I never heard of an interception. When I attended a course in behavioral and sensory processing, an interception was mentioned. This intrigued me and I decided to explore more. The problem is that not much research has been done on interception. So today I want to help answer the frequently asked question "What is an interception?" And help slightly remove this eighth sensing system.

What is an interaction? Eighth sensory system.

Connect with your children while exploring sensory processing

### What are the 8 senses?

Before we start discussing interception, I want to give a brief overview of all sensing system.

The sensory system is part of the nervous system. It is responsible for processing sensory information. The sensory system consists of sensory receptors, neural pathways and parts of the brain involved in sensory perception.

### What are the 8 senses?

Most people learn about the 5 common senses, but not everyone knows that there really are 8! I didn't even realize there were 8 until a few years ago (I knew there were 7, but the eighth surprised me).

### So what are they?

- Touch
- Hearing / hearing
- Visual / visual
- taste
- smell
- Proprioception
- Vestibular

### Interaction

If you would like to get more basic information about the 8 sensory systems, you can check out my post on all 8 senses of the sensory system here. I also have a 9-day free e-mail series on sensory processing that gives you one-page print pages per system throughout the series.

What is sensory processing? Free e-mail series to explain everything sensory!

What is an interaction? Explain Nitty Gritty

Interaction is the sense of knowing what is going on inside our body.

### Things like feeling:

- hunger
- thirst





tired  
 Feeling pain  
 Temperature (feeling hot or cold, etc.)  
 Use of services  
 Any other inner feelings  
 Science behind interception

We have already learned that interception is an internal sensory system of the body. Your body is full of sensory receptors that tell you where your body parts are. These receptors are located in your muscles and joints. It helps you understand what is happening around you and how your body moves in this environment.

Something similar happens with the interaction, except that the receptors are inside your skin and body organs. All of these receptors report to your brain with information about what is going on in your body.

All this helps to regulate your body functions such as hunger, thirst, bath needs, pulse, digestion etc.

With their exquisite antigenic specificity, human vaccines have greatly helped to eliminate or dramatically diminish the incidence of many historical and current plagues, from smallpox to bacterial meningitis. Nevertheless, As new infectious agents appear, and the number of diseases that can be prevented by the vaccine increases, the practice and benefits of a single-pathogenic or disease-targeted vaccine may pose a risk by timely production constraints, formulation complexity and regulatory hurdles. During the last influenza pandemic, vaccine producers and health authorities' extraordinary efforts have had little or no influence on disease prevention or mitigation. Recent work has demonstrated the possibility of protecting against all influenza. Virus types or even which are phylogenetically distant pathogens with vaccines based on the highly conserved peptide or saccharide sequences may change our paradigm. "Universal vaccination" strategies can be particularly helpful in treating antibiotic-resistant bacteria and fungi, which are not currently vaccinated [11].

COVID-19 has already produced fatal consequences for a social, economic and health society, with more than one hundred million documented cases and 2.3 million deaths. Although this epidemic is far from over,[12].

we now have access to the tools to end it, with the largest and fastest worldwide vaccine deployment. That we got there so fast is amazing, but we may not be so lucky next time.

More venomous and deadly corona air wings are waiting in the wings. Thus, the world needs a universal vaccine against a virus. The short periods of time with which safe and effective COVID-19 vaccines have been developed and put in place is unprecedented, lasting less than a year. However, suppose we encountered a more nasty strain with a higher mortality rate than cases compared to acute acute respiratory syndrome Coronavirus 2 (SARS-CoV-2). In that case, this rapid time frame may not be sufficient to prevent many 1918 deaths from influenza, which killed more than -50 million. Furthermore, there is an ongoing risk that the virus will collapse in ways that make the existing vaccines in COVID-19 more effective - as we have already seen with version B.1.351 first identified in South Africa - or even

ineffective[13].

In parallel, the recent convergence of technological advances in the biomedical, computing, and engineering sciences has ushered in a new antigen and vaccine discovery era. High-performance computing and machine learning, along with structural modeling, can greatly accelerate the detection of common antigenic targets shared between coronaviruses. Genetic sequences of coronavirus animal gene sequences can be used to model the evolutionary evolution of viruses. Ongoing efforts to decipher the principles of immunity in aging populations can improve vaccines' effectiveness for the most vulnerable people. Collectively, studies now show that the development of a universal vaccine for the coronavirus virus is scientifically possible.

It has to be a global effort. Responsible planning is required to identify key scientific topics and a framework for funding and sharing information, data and resources. At an early level, it will be important gear in a world major organization like the WHO. Besides, global efforts are required to identify specific neutralizing antibodies of the coronavirus virus in order to facilitate antigen detection against the coronavirus.

All of this cannot happen until all stakeholders across governments, industry, academia and NGOs (Non-governmental organizations) recognize it as a global public health priority. With COVID-19, much of the foundations were laid. Waiting until the crisis is over can prove to be a failure. It is estimated that the current epidemic will cost between \$ 8 and \$ 16 trillion worldwide, 500 times more than will be needed to prevent the next epidemic.

This is not to say that it will be easy, and that a stepwise access from COVID-19 to the Pan-Corona virus to universal virus vaccines may be required. SARS-CoV-2 adapts rapidly to humans, and new coronaviruses are mutating, recombining, and replicating in bats and other animal species, in a position to jump species sometime in the future. If you choose to wait for the next coronary virus to appear, it may be too late, as it was with COVID-19. Creating the tools to prevent the next viral epidemic is within our means and should be seen as a priority

Before the advent of the newest animal-borne disease, COVID-19, the world was in the final mile of eliminating one of the oldest viable diseases - rabies. For about 4,000 years humanity has been dealing with this contagious disease. Rabies has one the highest mortality rate of any [14]

the conventional infectious agent close to 100 percent. And it is practically always transmitted to people through bites from infected animals (dogs). As we know, the vaccine for dogs was developed as early as 1799. Extensive vaccination and other contraceptives have since saved about 2.9 million lives a year. Vaccinating dogs is not cheap and prevents transmission to humans. But this painful disease continues to kill about 60,000 annually: often children under the age of 15 across Africa and Asia. Part of the challenge is that eradicating rabies has been a victim of its own success: with millions of lives saved and tremendous progress in recent years, it is difficult to maintain momentum in the last mile, as victims are often the poorest people of the miserable living in far away communities [15].



Now the whole world is the grip of a new plague that is bringing back the fight against rabies.

Inflamed brains, toe rashes, strokes: Why COVID-19's weirdest symptoms are only emerging now[16]

Also for a much rarer syndrome called Guillain - Barré, in which the body's immune system attacks the nerves. In milder cases, encephalitis may cause flu-like symptoms; In more severe cases, it can cause seizures, paralysis and confusion.

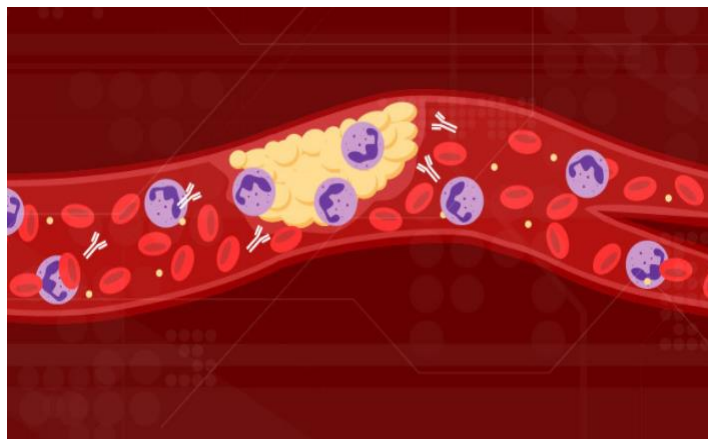
COVID-19 is not a breakthrough, as many different viruses like herpes, tick-borne viruses or the rabies and the original SARS - can cause encephalitis, when one of these viruses invades the nervous system[17], it can damage and ignite the brain by direct killing cells or by inviting the immune system to do the job, similar to a "cytokine storm",[18] and Kawasaki like symptoms [19]. In the case of the COVID-19 pandemic, Tyler says: "the cause is unknown".

With Guillain - Barré, the immune system attacks the network of nerves and nuclei that run throughout your body. This disorder tends to appear weeks after a bacterium has cleared the body and can cause weakness and tingling in the limbs that can eventually in the extreme cases lead to paralysis. Although this health disorder has only been observed in a handful of COVID-19 case reports, Tyler thinks its connection is not just a coincidence.

Scientists do not really know the exact mechanisms of Guillain-Barra, but it seems to be related to what is known as the body's acquired immune system, which responds to the pathogens by finding new specific antibodies to fight it. These antibodies take weeks to develop and are usually protective, but they are occasionally considered a snout, attacking the nerves and coating.

### New Cause of COVID-19 Blood Clots Identified

Blood clots continue to wreak havoc in patients with severe COVID-19 infection, and a new study explains what may trigger them in up to half of patients. The culprit for this disadvantage is: an autoimmune antibody that circulates in the blood, attacks the cells and activates arterial clots, veins and microscope vessels. Blood clots can cause life-threatening events such as stroke. And in COVID-19, tiny blood clots can restrict healthy blood flow, and impair oxygen exchange. These clot-causing antibodies are commonly seen in patients with antiphospholipid syndrome outside of the new coronavirus virus infection. The link between autoantibodies and COVID-19 was unpredictable, says parallel author Eugene Kenneth, a doctoral student, professor at the Center for Cardiovascular Medicine in Michigan Medicine and research researcher at the Heart, Lung and Blood Institute at the NIH. [20]



We need a more universal vaccination facility than later Now, we'm in luck that we have some COVID-19 vaccines. But as the SARS-CoV-2 virus develops rapidly, there is already concern that these vaccines will not be as effective on some of the new variations of the virus.

This means that there are two scenarios that make a universal vaccine for the coronavirus virus highly effective. The first and most immediate concern is whether the COVID-19 virus changes to evade existing vaccines. There have been reports that there are vaccines that are not effective against some new versions, but it seems to be a problem in preventing minor diseases and mostly just worrying about some virus variations. Moreover, it seems that the vaccines we have still protect against serious diseases and death even from new variations of the virus.[21]

### References

1. Obama Warned The U.S. To Prepare For A Pandemic Back In2014"; <https://www.youtube.com/watch?v=pBVAnaHxHbM>
2. "The next outbreak? We're not ready | Bill Gates"; [https://www.youtube.com/watch?v=6Af6b\\_wyiWI&fbclid=IwAR0bqLOqFHFw-KlSh9v6ykH580JSjH59jTqSZKG3aCzQcUJ0e1yZlryoFMo](https://www.youtube.com/watch?v=6Af6b_wyiWI&fbclid=IwAR0bqLOqFHFw-KlSh9v6ykH580JSjH59jTqSZKG3aCzQcUJ0e1yZlryoFMo)
3. Bil Gates (2018) "The next epidemic is coming. Here's how we can make sure we're ready"; <https://www.gatesnotes.com/Health/Shattuck-Lecture>