How To End the COVID-19 Epidemic.
Other than with vaccines?
Let's avoid putting all our eggs in the vaccine basket.

Please watch the following video about Trump's removal of protection:
https://www.youtube.com/watch?v=qOYYUkZG6b8
(This predates the election, and ends with a political message, but it's the best summary we have seen of the progress of the pandemic in the U.S., and the government's response.)

Diseases like the one causing the current epidemic have been arising every dozen years or less for the past 20-plus years, by jumping between species. ("Emerging viruses"). Dog diseases jumped to seals; bat and chimpanzee viruses jumped to humans; parvo virus jumped from minks to cats, and then to dogs; a type of iridovirus jumped from fish to frogs and reptiles, killing huge numbers of them.   For some reason, viruses that jump to another host become much worse killers than they were in their previous host species.

Epidemics like the current one are sure to happen again, within 5 or 10 years. It is amazing that the public and the politicians didn't realize this epidemic was overdue to happen again. Our government organized special agencies designed to detect new transfers of dangerous viruses, quick enough to prevent further spread, and they succeeded with MERS, SARS, Zika, and Ebola. Trump announced that these programs wasted money, because when the next pandemic started, he could then hire plenty of MDs. So those programs were phased out. Then COVID-19 spread too fast.

#1) Find out why/how children are so much less harmed than the elderly and chronically ill.

        Invent treatments that can change anyone's physiology such that their resistance
        to the coronavirus becomes as much as possible like the resistance of children.

[You tell me what is the key difference in children, or even just figure out what this difference might be, and I can try to invent possible ways to increase resistance.]

One possible clue is that adults who get "childhood" diseases like chickenpox or rubella are much sicker than children typically are.

#2) A better test for infection, that identifies infected people at least a day or two before they can transmit the disease.

Would you agree with the following generalization or not?

> If every single infected person could be identified, and rigorously quarantined for a week, with no exceptions, then the virus would go
extinct.

SARS, MERS and Ebola were defeated without vaccines or special medicines. A key difference is that the cough produced by the COVID-19 virus doesn't start until a day or two after it has become infectious. If the coughing started before the viruses were infectious, that would help prevent spreading. How could you use this information to fight the pandemic?

#3) Research on improving adjuvants? (irritating salt crystals and oils that non-specifically stimulate development of antibodies.) Maybe some could be designed to work better stimulating anti-coronavirus lymphocytes, and to produce vaccines much faster.

#4) Anything that speeds up vaccine production. Speed seems not yet to have been made a priority in the development and testing of vaccines.

#5) Injection of virus proteins into mules, rabbits, or healthy human volunteers, then bleed the animals and extract gamma globulin from the blood (as is done making anti-serum for treating poisonous snake bites.)

#6) Making monoclonal antibodies against viruses should also be practical. Perhaps one could even make monoclonal antibody-producing myeloma cultures that produce antibodies against coronaviruses, and stockpile these cultures, with the goal of very rapidly immunizing people against newly pathogenic strains of this particular category of viruses (that has produced several pathogenic viruses).

Also, is there any reason why anti-virus lymphocytes should only target virus mutants that cause disease. Vaccines that attack all coronaviruses

should work about as well.

Is it possible that specialists in making vaccines have drifted into a subculture in which it doesn't matter how slow or fast vaccines get made, but the worst thing in the world, to be avoided at all costs, is if even a few people are made sick by a vaccine.

#7) How to invent new theories without needing to think or be smart.

Notice that the classic scientific method:
"INVENT A THEORY",
 TEST THIS THEORY, (does it make correct predictions?),
 INVENT ANOTHER THEORY,
doesn't tell you how to invent new theories!

How to (SYSTEMATICALLY!) invent new theories (explanations) **for any phenomenon** about which you already have at least one theory, even if that one theory is known to be false.

start with an existing theory;
write it out in detail;
<u>underline</u>, or otherwise **mark every _word that has an opposite_**
Write the theory many times.
Finally, generate new theories by **reversing even numbers** (2, 4, 6, 8 etc of those words that have opposites.
For example, cross out the word "stimulate" and replace it with the word "inhibit", and cross out the word "maximize" and replace it with "minimize". **A double negative equals a positive.** That is all there is to this system. But it can boost your imagination. It has helped me.

Incidentally, consider the following fact about those geometric theorems we all learned in high school. If you substitute the word **point** for the word **line**, and also the reverse, substituting the word **line** for the word **point,** *these combinations of changes will produce a new theorem, which will be true, if the original theorem is true. This surprising and beautiful fact was discovered in the early 1800s by a French mathematician.*

*It is called "**Duality**" but the wikipedia article about it is a mess.*
Electric circuits have their own versions of duality, in which capacitance is substituted for inductance, voltage for amperage, etc.

The discovery of geometric duality led automatically to the discovery of many hundreds of previously unknown theorems.

inhibit, stimulate
decrease, increase
pull, push
maximize minimize
bind, release   etc. etc.