

Dear valued patients and colleagues

Antibody testing

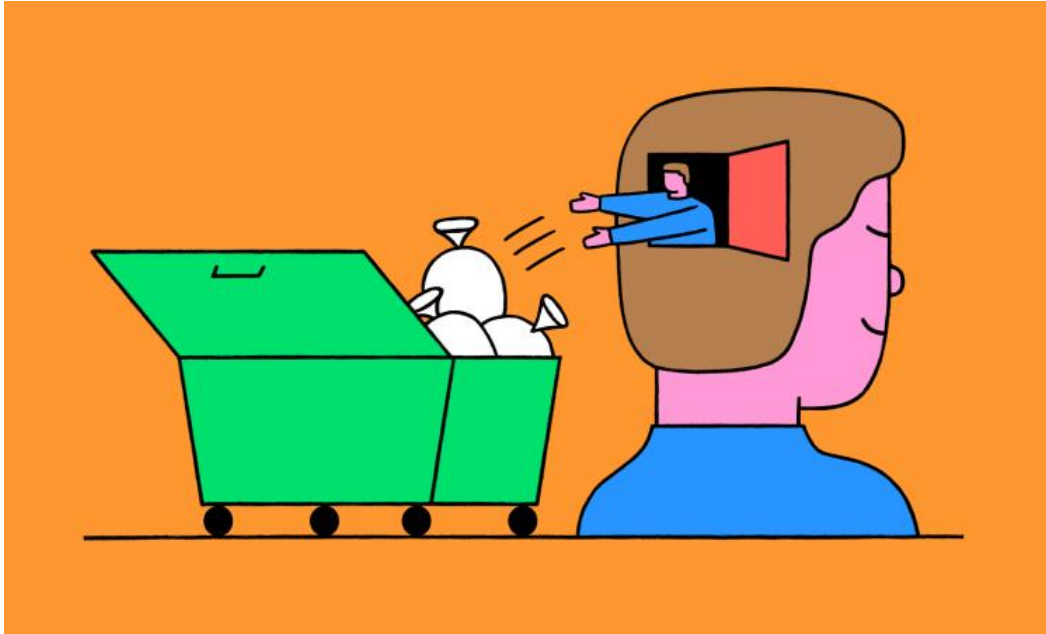
I will start sending out antibody tests to labs running the Abbott approved test. I have interviewed one of the lab directors and he stated the test is a semi-quantitative one that will measure IgG only. According to the lab director the specificity of the test was 99% and if you wait at least 10-14 days after infection, it has a sensitivity of 98%. These statistics at first glance seem a little high, but I believe this is the best test to date. He stated cross reactivity was very low with the “common cold” type of coronavirus but may interact with the SARS-1 virus which is not a problem for the USA. Please remember you could still be a carrier with antibodies and that there is no proof yet that since you have antibody you are now immune to further infection. In the future, Abbott will do IgM, as well as IgG antibody testing. We will soon be doing actual PCR testing simultaneously for the coronavirus.



Uncertainty

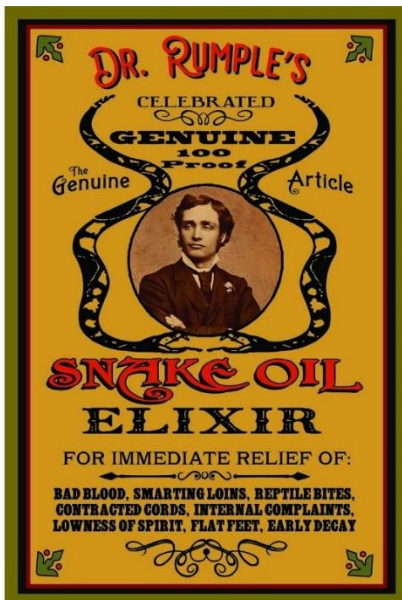
Scientists, politicians, and the media must come to realize that there is much uncertainty about the disease called Covid-19. Until the facts are in and generally decided on, the community of scientists, physicians, politicians and media are going to have to live with uncertainty without demonizing people they disagree with.

As occurs frequently, things we initially believe end up not being true. I remember during my training, the drugs known as beta-blockers were thought to be contra-indicated in heart failure. It was felt they further weakened an already weak heart since they suppress the strength of a heartbeat. This makes sense, right. Well, someone thankfully did research on the subject and found that beta-blockers were greatly beneficial blocking overstimulation that naturally occurs in a failing heart. Now everyone puts patients on beta-blockers if they have a failing heart as a standard of care. Talk about a 100% turnaround.



I bring this up because we have lots of different ideas about Covid-19 and scientist, physicians, politicians and the media are really into slinging mud at those individuals of different opinion to silence or demonize those members of “the other team”.

It is made even harder because as, in any pandemic, snake oil cures pop out of the woodwork. Not all of these “interesting” treatments are based on a profit motive alone. People are looking at any data point of positivity and trying to see if that treatment could be of assistance. Even outstanding physicians are trying just about anything and using the pasta technique and seeing what sticks to the wall. Some of these attempts may appear odd but desperate times cause desperate measures. I have heard of anti-acids and nicotine patches being evaluated recently. It is expected, in these times of crises, to try just about anything.



Pity the scientist who postulates or attempt to try a different approach that is not accepted by the mainstream. Pity the physician who prescribes a medicine that may not be approved by a political party. Pity the epidemiologist who does not march in lock step with extreme lockdown measures. All of them will vilified

We need to let our physicians and academics be free to explore without social media condemnation or career suicide. We need to move to freedom of thought and move to restrictive social boycotts and threats for those academicians, scientists and physicians who are truly attempting to help us find the answers to this disease rather than personal aggrandizement.

We have lots of questions to be answered and we need to hear various opinions. Some of these unknowns currently are:

- how will the disease spread?
- how long does immunity last?
- how effective will a vaccine be?
- what is the true mortality rate?
- which drugs are truly of benefit?
- are homemade masks effective?
- and some many more questions.

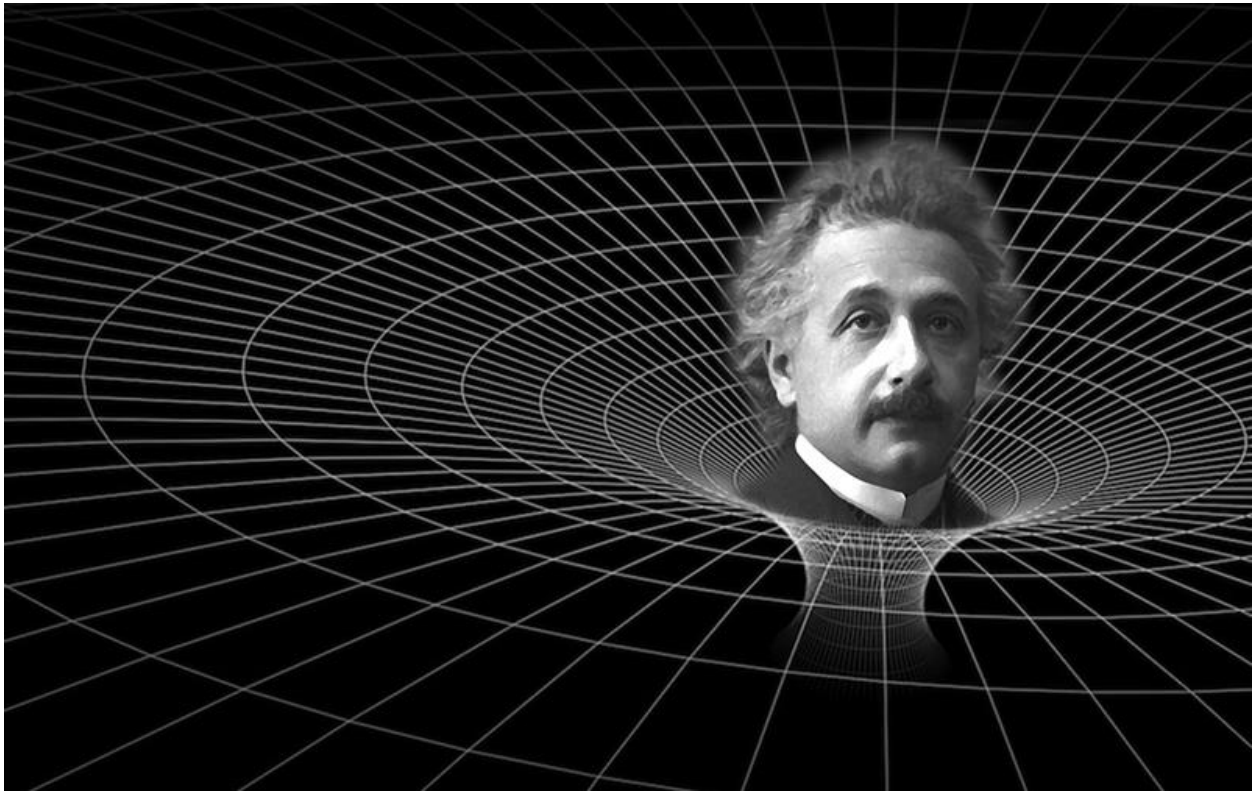
As long as there are open questions, we will have differences of opinions.



Also please be accepting of error and mistakes. No one has fought a war, invented a new product or cured a malady without making mistakes along the way. We need to stop pointing fingers at every little slip of the tongue or wayward thought. Mistakes are a natural part of human exploration as long as we learn from them. In fact, they are an expected natural occurrence of anyone investigating a new.

Albert Einstein gained fame with his special relativity. To refresh your memory, this theory determined that the laws of physics are the same for all non-accelerating observers and that the speed of light in a vacuum was independent of motion of all observers. Einstein then spent 10 years trying to include acceleration in the theory and finally published his theory of relativity in 1915. If you think he went from success to success you would be wrong. His most famous equation $E=mc^2$ at first could only be derived for a particle at rest. He could not account for how energy worked for a particle in motion. Not until 6 years later with more advances in physics did the flaw in his work come out and he was able to derive the formula we know.

Einstein also rejected the indeterminate, quantum nature of the universe. If you want to learn more of this go to <https://www.forbes.com/sites/startswithabang/2016/12/29/the-four-biggest-mistakes-of-einsteins-scientific-life/#7cce303e8db4>. The bottom line is one of history's genius scientist made many mistakes as he moved forward to one of the greatest scientific breakthroughs known. You can surely expect the same from us less genius individuals.



So, let us allow a broad range of interpretations and opinions. Do not shut your ears to new approaches to this disease. If you are a fan of social distancing do not deprecate your friend who find that we should practice a Swedish model of more leniency. We will ultimately come to some answers. But remember my example of heart medicine, the black sheep of heart failure medicine turned into the white swan.

Finally, though we are moving at lightning speed to save lives, our total control may take years. Honestly, I do not believe this coronavirus will years to solve, in actuality. But let us be patient.

When I first when into training and was an Intern, we had no idea why young men were starting to die in front of our eyes with what become known as Acquired Immune Deficiency Syndrome (AIDS). In 1983 we discovered the virus which caused the disease and in 1985 tests became available. Several drug trials ensued. Some people traveled abroad to take experimental treatment abroad, even buyers' clubs and co-operatives were established in the US to sell the experimental drugs as cheaply as possible.



In 1996 researches had some stunning results. People taking a three drug anti-HIV regimen returned to health even those who had been deathly ill, people started these medications which required taking a huge volume of pills several times a day, with side effects. Today treatment has changed again so that people can take a single drug once a day.

The reason I tell you this story is that we will be more successful faster finding answers to the coronavirus problem. We will stumble and fail at times, but eventually we will cure this problem as well. It may take more time than you wish, but we will survive.

Ultimately, when we have finished this process, we will look back and find almost no one was 100% right. We will probably place our hands to our foreheads and bemoan the fact that if we only knew something a little earlier, even more lives could have been saved. There will even be those, at that point in the future, wanting to finger point and blame. Ignore them, some folks never learn.

Viral Shedding

Did you know that coronavirus patients can continue to shed the virus for up to six weeks after symptoms first start? Do not go crazy with this news. This is similar to other viral infections and this does not mean these individuals are contagious. Patients with longer shedding seemed to be older with

co-morbidities. Where have we heard this before? In a small study (56 patients) who were tested for viral shedding, all patients recovered and were discharged.

Medicine and Music

George Bizet suffered from recurrent throat complaints. He was a heavy smoker and was an extremely hard worker. Evidently in 1868 he had an “abscess in the windpipe”. In 1871, 1874 and March of 1875 he again had severe bouts of throat pain. He became depressed with the evident failure of Carmen during this March of 1875 episode and was slow to recover. In the end of May, he fell ill again. On June 1, he had a high fever and pain followed by an apparent heart attack. He seemed to recover but was once more stricken a few days. He then died at age 36. After a special performance of Carmen just after his death the press, which had all universally condemned the spectacular piece previously, now called Bizet a master.

Everybody’s favorite of George Bizet is Carmen so here are a few choice slices

L’amour est un oiseau rebelle: <https://www.youtube.com/watch?v=2Tu4H1VnAgw>

March of Toreadors: <https://www.youtube.com/watch?v=2Tu4H1VnAgw>