## Question of the Month



## Did God create viruses?

Wow! What a time we're living in! I was thinking the other day (which I do from time-to-time) that when you hear about a tornado that swept through a few counties in Kansas or a hurricane that ravaged a large portion of the Caribbean, you certainly feel for all the people affected by those tragic events. Even so, it generally doesn't affect you directly. Life goes on, and even those who were affected recover. Fairly often, it doesn't take too long and it's almost as if it never even happened. Well, our current situation (Spring 2020) is very different. Who are you going to call to tell them about what's happening? Everyone is dealing with this



pandemic and we don't really know how to respond. Would you ever have imagined just two months ago that we'd all be locked-up in our homes barely allowed to go anywhere or do anything?

So, what's with this virus? It certainly seems devastating, so where did it come from and more importantly, we could ask, "Did God create it?" Did He create viruses in general? If so, why?

The virus we are dealing with (COVID-19) is a new corona virus not seen before. Unbeknownst to most people, the common cold is actually a type of corona virus. "CO" is for corona, "VI" is for virus, "D" is for disease and "19" is for 2019. Conspiracy theories claim it was created in a laboratory with nefarious intentions in mind. I have not seen any evidence for that. On the contrary, it seems very likely to have come from bats (maybe) in a "wet-market" in Wuhan, China.

Would you be surprised to find out that you have more viruses in your body than bacteria? It's true! A typical human adult has between 60-100 trillion cells in their body, and they have more bacteria than cells. Even more amazingly, they have more viruses than bacteria! Just like the fact that most bacteria in your body are good, but some are bad, viruses are mostly good, but some are obviously not. The good viruses help regulate the kinds and amounts of bacteria we have, especially in our gastrointestinal tract (i.e., our "gut").

Viruses aren't actually alive. So, how do they replicate themselves? They hijack the replication machinery of living cells, forcing them (the cells) to make copies of the viruses. The overall answer is that even though God originally created a perfect world, it has suffered greatly because of the curse (including death) that was introduced by man's sin (Romans 5:12). Somethings that were once good have now become corrupted. Mutations are (largely speaking) random copying errors in DNA. When living things (cells, plants, animals, people) reproduce, they make copies of their DNA. Occasionally, copying errors occur and are passed along to the offspring. In humans, for example, every time we reproduce we add 100 mutations (or mistakes) to our genome. In other words, every generation has 100 more mistakes in their DNA code than the previous generation. Can you see a problem with that? We are not "evolving," we are "devolving." That's a whole separate topic in and of itself... for some other time.

## Question of the Month



Fortunately and unfortunately, viruses also mutate when they reproduce. I say unfortunately, because it means that even when we develop a cure or vaccine, a new mutated version maybe be unaffected by our previously effective efforts. I say fortunately, because the mutations may also lead to the virus dying out on its own. Too many mistakes in its genome can prohibit it from inserting itself into living cells, thus not being able to replicate, which means it's the end of the line... extinction!

Our bodies are often able to develop anti-bodies to fight rogue viruses. In fact, when a baby is born, it has anti-bodies from its mother, received through the placenta and breast milk. Another great "design" feature! However, when we are introduced to a virus we've never seen before, as is the case with COVID-19, we aren't prepared to handle it properly and often need help from the medical community.

Interestingly, we can ask a similar question regarding other harmful things such as snake or spider venom. Did God create those as well? If there was no death in the original creation, why would these creatures need such an effective defense system? One answer is that these defense mechanisms (in this case, venom) had a beneficial effect, but, because of the curse, have "morphed" into something harmful that can actually be used in self-defense. In other words, God designed it just that way, knowing the fall would occur, creating a very different world.

In an article entitled, "Venom back in vogue as a wellspring for drug candidates," (from the Proceedings of the National Academy of Sciences, April 22, 2020):

Now, the pharmaceutical industry has a growing interest in venom, as some companies opt to return to drug discovery inspired by natural compounds, a trend that fell out of fashion about 40 years ago....

Often these toxins have clear potential to treat human disease. She [biochemist Helena Safavi at the University of Copenhagen in Denmark] calls them a "treasure trove for biomedical explorations."

The COVID-19 virus isn't the first to wreak havoc on the human population, and it certainly won't be the last! It's a sober reminder that we are not in control. Fortunately, we know who is! God is still on the throne and there's only room for one! He's not surprised by what is happening, nor is He panicking, so we don't need to panic either. We need to take reasonable steps to protect ourselves, but ultimately trust God for the outcome. What is a reasonable response? Don't get me started on that! I have opinions, but that's all they are... opinions. And it ultimately doesn't matter what I think. I am using this situation in three main ways: (1) getting a lot of things done that otherwise I would never have had time to do, including spending a lot more time with my wife, (2) checking (and correcting) my attitude towards local political leadership and their decisions, and (3) using this as a great opportunity to share with others the REAL solution to our problems... Jesus Christ!

If you have any questions about this or any other issue, please don't hesitate to contact us!