Disclosure

of things evolutionists don't want you to know

Volume 25 Issue 8 www.ScienceAgainstEvolution.info May 2021

The Evolution of COVID-19

What can we learn about evolution from viruses?

This month's essay was inspired by a combination of three things: (1) Questions about the origin of COVID-19; (2) The many variants of COVID-19; and (3) A question from a reader about a claim that retroviruses prove men and apes evolved from a common ancestor.

Definitions

Before we can address those questions, we need to establish a common foundation so that all our readers know what DNA, RNA, and viruses are, and the difference between a virus and a retrovirus.

These concise definitions come from the Australian Health Ministers' Advisory Council:

> **DNA**: deoxyribonucleic acid, a self-replicating material which is present in nearly all living organisms as the main constituent of chromosomes. It is the carrier of genetic information.
>
> **RNA**: ribonucleic acid, a nucleic acid present in all living cells. Its principal role is to act as a messenger carrying instructions from DNA to initiate and control the synthesis of proteins, although in some viruses RNA rather than DNA carries the genetic information. [1]

Live Science provides us with a somewhat longer, more helpful explanation.

> Together, RNA, short for ribonucleic acid, and DNA, short for deoxyribonucleic acid, make up the nucleic acids, one of the three or four classes of major "macromolecules" considered crucial for life. (The others are proteins and lipids. Many scientists also place carbohydrates in this group.) Macromolecules are very large molecules, often consisting of repeating subunits. RNA and DNA are made up of subunits called nucleotides.
>
> The two nucleic acids team up to create proteins. The process of creating proteins using the genetic information in nucleic acids is so important to life that biologists call it "the central dogma" of molecular biology. The dogma, which describes the flow of genetic information in an organism, according to Oregon State University, says that DNA's information gets written out, or "transcribed," as RNA information, and RNA's information gets written out, or "translated," into protein.
>
> "RNA in a basic way is the biomolecule that connects DNA and proteins," Chuan He, a University of Chicago biologist who studies RNA modifications, told Live Science. [2]

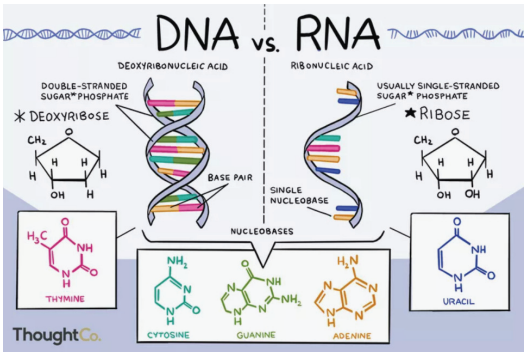
The discussions of the origin of life usually neglect the fact that without both DNA and RNA, life cannot exist. Proving DNA or RNA could have arisen alone by chance is not a sufficient prerequisite for life. Both had to evolve spontaneously.

The difference in the names (DNA and RNA) comes down to whether or not the ribonucleic acid is de-oxygenated or not. Notice the missing "O" in

[1] https://consultations.health.gov.au/genomics/national-health-genomics-policy-framework/supporting_documents/National%20Health%20Genomics%20Policy%20Framework%20Consultation%20Draft%20D161361443.PDF

[2] https://www.livescience.com/what-is-RNA.html

the picture below. (The difference is in the bottom-right corners of the two pentagons.)



Summary of Differences Between DNA and RNA

1. DNA contains the sugar deoxyribose, while RNA contains the sugar ribose. The only difference between ribose and deoxyribose is that ribose has one more -OH group than deoxyribose, which has -H attached to the second (2') carbon in the ring.
2. DNA is a double-stranded molecule, while RNA is a single-stranded molecule.
3. DNA is stable under alkaline conditions, while RNA is not stable.
4. DNA and RNA perform different functions in humans. DNA is responsible for storing and transferring genetic information, while RNA directly codes for amino acids and acts as a messenger between DNA and ribosomes to make proteins.
5. DNA and RNA base pairing is slightly different since DNA uses the bases adenine, thymine, cytosine, and guanine; RNA uses adenine, uracil, cytosine, and guanine. Uracil differs from thymine in that it lacks a methyl group on its ring. [3]

While DNA has the instructions on how to make proteins, it is RNA that actually provides these instructions to the ribosomes, organelles in the cell that act as "protein factories." You see, DNA never actually leaves the cell's nucleus. The nucleus instead builds a single-threaded molecule called RNA, which has a copy of the DNA's instructions.

Like DNA, RNA also has nitrogen bases that act as a code that the cell can read. The RNA then takes the copy of the instructions and delivers them to the ribosomes. There, RNA helps the ribosomes properly build the correct proteins that the body needs. [4]

It takes both DNA and RNA for a cell to function and reproduce.

[3] https://www.thoughtco.com/dna-versus-rna-608191
[4] https://www.dictionary.com/e/dna-vs-rna-vs-mrna-the-differences-are-vital/

Viral Infection isn't Easy

Viral infection isn't as easy as you might suppose. It is a six-step process.

How Viruses Infect Cells

The basic process of viral infection and virus replication occurs in 6 main steps.

1. Adsorption - virus binds to the host cell.
2. Penetration - virus injects its genome into host cell.
3. Viral Genome Replication - viral genome replicates using the host's cellular machinery.
4. Assembly - viral components and enzymes are produced and begin to assemble.
5. Maturation - viral components assemble and viruses fully develop.
6. Release - newly produced viruses are expelled from the host cell. [5]

Are Viruses Alive?

Scientists are not sure whether viruses are living or non-living. In general, scientists use a list of criteria to determine if something is alive. Let's look at some traits of living things and see if viruses also have those traits.

Living things have cells. Viruses do not have cells. They have a protein coat that protects their genetic material (either DNA or RNA). But they do not have a cell membrane or other organelles (for example, ribosomes or mitochondria) that cells have.

Living things reproduce. In general, cells reproduce by making a copy of their DNA. Unlike cells, viruses do not have the tools to make a copy of their DNA. But they have found other ways to make new viruses. This is done by inserting virus genetic material into a host cell. This causes the cell to make a copy of the virus DNA, making more viruses.

Many scientists argue that even though viruses can use other cells to reproduce itself, viruses are still not considered alive under this category. This is because viruses do not have the tools to replicate their genetic material themselves.

More recently, scientists have discovered a new type of virus, called a mimivirus. These viruses do contain the tools for making a copy of its DNA. This suggests that certain types of viruses may actually be living.

Living things use energy. Outside of a host cell, viruses do not use any energy. They only become active when they come into contact with a host cell. Once activated, they use the host cell's energy and tools to make more viruses.

[5] Regina Bailey, https://www.thoughtco.com/virus-replication-373889

Because they do not use their own energy, some scientists do not consider them alive. This is a bit of an odd distinction though, because some bacteria rely on energy from their host, and yet they are considered alive. These types of bacteria are called obligate intracellular parasites.

Living things respond to their environment. Whether or not viruses really respond to the environment is a subject of debate. They interact with the cells they infect, but most of this is simply based on virus anatomy. For example, they bind to receptors on cells, inject their genetic material into the cell, and can evolve over time (within an organism).

Living cells and organisms also usually have these interactions. Cells bind to other cells, organisms pass genetic material, and they evolve over time, but these actions are much more active in most organisms. In viruses, none of these are active processes, they simply occur based on the virus's chemical make-up and the environment in which it ends up. [6]

Viruses are intracellular obligate parasites, which means that they cannot replicate or express their genes without the help of a living cell. A single virus particle (virion) is in and of itself essentially inert. It lacks needed components that cells have to reproduce. When a virus infects a cell, it marshals the cell's ribosomes, enzymes and much of the cellular machinery to replicate. Unlike what we have seen in cellular replication processes such as mitosis and meiosis, viral replication produces many progeny, that when complete, leave the host cell to infect other cells in the organism. [7]

If viruses can't reproduce without a living cell, where did the first virus come from? How did that first virus stumble upon a cell and know to perform the six step process (from adsorption through release) to reproduce itself?

Coronavirus

Of course, most of the news today is about the coronavirus family; but few people know much about it.

Coronavirus is a large family of enveloped viruses with helical-shaped nucleocapsids. The name 'corona' was given to this virus family as they have crown-like projections on their surface. These viruses infect the respiratory tract of mammals. Coronaviruses cause illnesses ranging from common cold and pneumonia to severe acute respiratory syndrome (SARS) and the Middle East respiratory syndrome (MERS). They can also affect the gut of mammals. The common symptoms of coronavirus infection are a runny nose, cough, sore throat, and possibly a headache. People of all ages are susceptible to this virus.

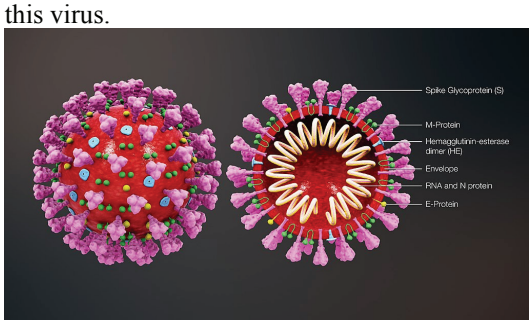


Figure 01: Coronavirus

There are different types of coronavirus. Generally, coronavirus can be transmitted from animals to humans. When people have weakened immune systems, this virus spreads from person to person through droplets carrying the virus. Therefore, touching or shaking hands with an infected person, making contact with the objects having the virus, etc. can cause the spread of the virus. Therefore, in order to prevent the spreading of this virus, it is necessary to take precautions such as wearing surgical face masks, washing your hands using soap for at least 20 seconds, avoiding close contact with infected people, etc. [8]

The coronavirus is like the flu. It causes similar symptoms, but is different.

Influenza virus (commonly called flu virus) is a single-stranded RNA virus that belongs to the viral family Orthomyxoviridae. It causes an infectious disease called influenza in vertebrates. The common symptoms of influenza infection include high fever, runny nose, sore throat, muscle and joint pain, headache, coughing, and feeling of tiredness.

The virus spread through the air from coughing and sneezing. It can also be spread by touching the objects contaminated by the virus and then touching the nose, mouth and eyes. The disease appears two days after exposure to influenza virus. Then it can last for less than a week. In most people, the infection resolves itself. But in certain people, especially in immunocompromised people, young children aged below 5, and adults aged above 65, it can last for several weeks and can cause complications.

[6] Abigail Howell, https://askabiologist.asu.edu/questions/are-viruses-alive

[7] Regina Bailey, https://www.thoughtco.com/virus-replication-373889

[8] https://www.differencebetween.com/difference-between-coronavirus-and-influenza/

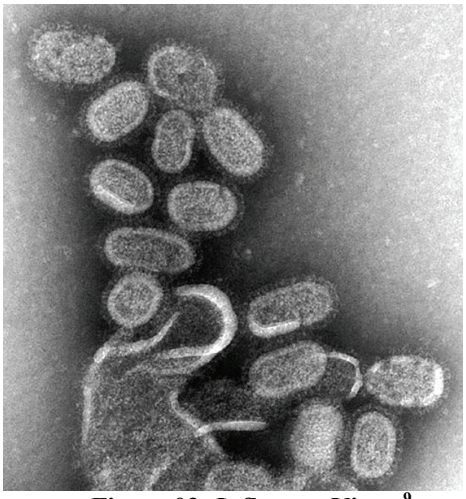


Figure 02: Influenza Virus [9]

Retroviruses

The inspiration for this essay came from an email asking about whether or not retroviruses prove men and apes evolved from a common ancestor, so we need to know what a retrovirus is.

The name, retrovirus, could be misleading. "Retro" suggests the notion of a throw-back. Sometimes sports teams wear retro jerseys, which they haven't worn for years (instead of their regular jerseys) for a single game to evoke some nostalgia. So, one might easily think that a retrovirus has regressed to an older, primitive form. That's not the case. Retroviruses are not throw-back viruses. They are viruses that work "backwards" (that is, opposite to the way most viruses work).

> **retrovirus**
> *noun, plural* ret·ro·vi·rus·es.
> any of a family of single-stranded RNA viruses having a helical envelope and containing an enzyme that allows for a reversal of genetic transcription, from RNA to DNA rather than the usual DNA to RNA, the newly transcribed viral DNA being incorporated into the host cell's DNA strand for the production of new RNA retroviruses: the family includes the AIDS virus and certain oncogene-carrying viruses implicated in various cancers. [10]

So, with all that background information out of the way, we can get down to business.

Origin and Evolution of COVID-19

When this essay was written, it was generally (but not universally) believed that SARS-CoV-2 virus (which causes the COVID-19 disease) came from a laboratory in China. There was still an ongoing debate about whether it was accidentally, or intentionally, released from that lab. Sadly, because the scientific arguments are often infected with political bias, they aren't reliable.

It seems to be the rule, rather than the exception, that many scientists are now just pawns of the politicians. We believe the theory of evolution started the trend for power-hungry people to use scientists to give their political opinions credibility. Where one stands on issues such as evolution, global warming, fracking, wearing masks, and vaccinations, can often be predicted by knowing the political party affiliation of the person taking the stand. If these issues were purely scientific, then they would be believed, or rejected, evenly across party lines. The fact that positions on these issues are stated in political party platforms is proof that the "science" behind them is politically driven.

One of the few things that everyone agrees upon is that there are now several strains of COVID-19, and that those strains evolved naturally. It is certainly true that, because of duplication errors that often happen during reproduction of viruses, there are differences in the resulting strains. From a Darwinian point of view, some of those strains might be "better" than others, and the better ones might be more likely to win the battle for survival and become more dominant in the population.

That's really no different than recognizing that some horses are faster than others, as was proved earlier this month in the Kentucky Derby. [11] But horses have not evolved wings to become like Pegasus, even though that would help them win races. They are still horses; and the COVID-19 variants are still coronaviruses. The important issue is whether or not natural variations can lead to new kinds of living things—and science proves that they can't. Variations in existing species have never been observed to create living things with novel characteristics in nature. Some horses might naturally develop differently colored hair—but they don't naturally grow wings.

While Science Against Evolution will not take a stand on whether or not COVID-19 was created in a Chinese laboratory, we will make this observation: If it was created in a laboratory, it was created by a designer on purpose. If it was created in a lab, it was fashioned by taking an existing virus and modifying it. It wasn't made from scratch.

Regardless of whether or not COVID-19 was created in a lab, it is certainly true that skilled technicians certainly could have done it; but that

[9] *ibid.*
[10] https://www.dictionary.com/browse/retrovirus
[11] *Disclosure*, June 1999, "The Kentucky Derby Limit", http://scienceagainstevolution.info/v3i9f.htm

does not prove that they did do it. Possibility does not prove actuality. Evolutionists and creationists alike seem to forget this. Even if an evolutionist proved that apes and humans COULD have evolved from a common ancestor, it would not prove that they DID. Even if a creationist proved that God has the power to create life, it would not prove that He did. Proving that something is possible does not prove that it actually happened.

This month's email column addresses the claims that similar retroviruses in human and chimp genomes could have been inherited from a common ancestor. Even though it is possible, that doesn't prove that they actually were inherited from a common ancestor. It is possible that they were put there by a common designer; but possibility isn't proof that retroviruses actually were put in DNA by a designer.

Where Did it Come From?

"Where did it come from?" is an ambiguous question. It could mean, "Where was the location of origin?" That's not the important question we are asking. We want to know, "From WHAT did it come from?"

No matter where the COVID-19 virus came from in the geographical sense, it didn't come from nothing.

If it came from a Chinese laboratory, it came from a laboratory where they were experimenting with corona viruses—it didn't come from an athletic shoe factory. If it came from a Chinese market, it came from a bat that had a corona virus—it didn't come from an orange or banana. COVID-19 is a modification (purposeful or accidental) of a virus that already existed there, which was a modification of another virus that already existed, which was a modification of a different virus that already existed. You could say it is viruses, not "Turtles all the way down." [12] Viruses don't arise spontaneously. They come from existing viruses. Where did the first virus come from? Evolutionists believe, without proof, and in spite of science, that the first virus just ~~miraculously~~ *accidentally* appeared out of nothing.

Computer Viruses

Just as a biological virus inserts itself in DNA and makes multiple copies of itself which it spreads to other living things, a computer virus inserts itself in a program to cause it to make and spread multiple copies of itself.

Where did the first computer virus come from? It didn't arise when somebody was transferring a file that was accidentally corrupted during the copying process. The first computer virus was created intentionally by two brothers to protect their software from illegal copying by disabling the computer with the illegal copy. [13] They wanted to punish people who deserved to be punished.

That first computer virus inspired evil people to write similar programs which would disable innocent people's computers just for the fun of it. Vigilante justice evolved into vandalism.

Perhaps the first biological virus was created as part of "the curse." [14] We don't take a position on that because it cannot be proved or disproved scientifically. Just as we don't take a position on where the COVID-19 virus came from, we simply insist that it had to come from a preexisting virus. Viruses don't arise from nothing spontaneously. They come from preexisting viruses which have been changed intentionally or accidentally.

Email

Retrovirus Rebuttal

The claim retroviruses prove evolution is clearly misstated.

Rashed sent us this email:

> Hello, Pogge. First I would like to thank you for your effort throughout the years to spread knowledge and give average people insight into things they normally wouldn't even bother question. I started reading your newsletter around 2013 and it was one of the main motivators for me to study science (currently a physics student).
>
> Onto the main topic, I had come across a video on YouTube arguing how Endogenous Retroviruses are evidence that humans and chimps have a common ancestor. Here's the link for the video:
>
> https://youtu.be/oXfDF5Ew3Gc
>
> The video doesn't go into any sort of sufficient details about these retroviruses and to be quite frank, I didn't understand much about them from the video or searching through Google. I would greatly appreciate your insight into this matter and whether there is any truth to what is being claimed in the video.
>
> Best regards,
> Rashed.

The link took us to a 12-minute video titled,

[12] **"Turtles all the way down"** is an expression of the problem of infinite regress. The saying alludes to the mythological idea of a World Turtle that supports a flat Earth on its back. It suggests that this turtle rests on the back of an even larger turtle, which itself is part of a column of increasingly large turtles that continues indefinitely.
https://en.wikipedia.org/wiki/Turtles_all_the_way_down

[13] https://en.wikipedia.org/wiki/Brain_(computer_virus)

[14] Genesis 3:17-19

"DNA Evidence That Humans & Chimps Share A Common Ancestor: Endogenous Retroviruses" by a group called "Clearly Stated." The caption at the bottom of the video said,

> Here we explore the amazing discovery of Endogenous Retroviruses (ERVs) in our own DNA. These are genetic remnants of antient virus infections suffered by our ancestors. It turns out that many of our Endogenous Retroviruses are shared by chimpanzees. This is because we share a common ancestor with them.

It is worth discussing because this video by the well-funded group called Clearly Stated, had been viewed 65,953 times on May 11, 2021.

Take Time to Think

When I first watched the video, it seemed very convincing—but when I watched it a second time to transcribe it, it wasn't. I wondered why watching it made it more convincing than reading it.

At first, I thought it might have been the graphics; but it wasn't. It's true that the graphics were well done; but they weren't necessary and didn't add much to the narrative.

Then I realized the difference was speed. When I was transcribing it, I listened to four or five words and stopped the video to type them. Then I listened to four or five more words, and typed them. When I had transcribed a paragraph, I went back and listened to the video while reading my transcript to make sure I had transcribed it correctly.

That forced me to listen to what was said, and forced me to think about it. When I heard it full-speed, it sounded convincing because I didn't have time to question it. When I had time to think about it, the fallacies were obvious. It is always a good idea to think about what you hear or read, rather than just accepting it at face value.

Unless otherwise noted, all the quotes below came from https://youtu.be/oXfDF5Ew3Gc at the time segment given in square brackets.

Fossils

Near the beginning and end of the video there are some bold assertions about fossils.

> Today, hundreds of transitional fossils have been found. [0:56]

> Endogenous retrovirus DNA alone is more than enough to independently confirm what we already knew from the study of fossils. [10:21-10:28]

> … independent line of evidence. [1:09]

What do fossils have to do with DNA? Nothing, really. These statements are "red herrings" designed to make you think that fossils and DNA corroborate each other, to make you believe both lines of evidence are true.

The claim that "hundreds of transitional fossils have been found" is misleading, at best. One might think that there are hundreds of skeletons of transitional creatures. The truth is that hundreds of isolated teeth and bone fragments have been found which evolutionists claim to represent transitional forms. For example, there is Eosimias, claimed to be the transitional creature which "linked man to monkey". [15]

The fossil evidence for this creature consists of the two tiny bone fragments shown in the picture above. Those two tiny bone fragments count as two of the hundreds of transitional fossils, by the evolutionists' method of reckoning.

Even though the classic sequence of "horse" fossils often displayed in museums was debunked in 1951, and admitted to be wrong by the Chicago Field Museum of Natural History in 2002, [16] many people still believe the fossil record shows how horses evolved.

Of course, if retroviruses really are an "independent line of evidence," any discussion of fossils is irrelevant. The fossil argument was included as an attempt to prejudice your attitude toward their argument.

---

[15] *Disclosure*, September 2000, "Eosimias", http://scienceagainstevolution.info/v4i12n.htm

[16] *Disclosure*, February 2002, "Horses and Peppered Moths", http://scienceagainstevolution.info/v6i5f.htm

Families

The video begins with this true statement:

> Even before evolution was discovered, scientists studying comparative anatomy already grouped humans into the ape family, alongside chimpanzees. In those pre-evolution years, however, the word "family' was often used figuratively. [0:27-0:33]

Think about that. Linnaeus, a creationist, created the modern method of classification (taxonomy) which groups living things in a hierarchal structure (kingdom, phylum, class, order, family, genus, species) based on similarity. It was done for convenience of comparison, not proof of evolution. Things can be learned by comparison and contrast. The classification system helped scientists to compare and contrast living things. Originally, humans and apes were grouped in the same "family" to make it easier to figure out what makes humans different from apes.

After the theory of evolution was proposed, taxonomy was modified in an attempt to represent descent with modification. Taxonomy does not prove humans and apes share a common ancestor. Taxonomy simply recognizes similarities.

To their credit, the video does acknowledge that even after Linnaeus proposed his *Systema Naturae* in 1738, scientists accepted the fixed-species view. It wasn't until Darwin proposed his theory in 1859 that scientists began to believe in descent from a common ancestor.

Retroviruses

After that 2-minute introduction, the video defines what a retrovirus is.

> A retrovirus is a special type of virus that reproduces by inserting its genes directly into a cell's DNA. The virus genes become a seamless, permanent part of the host cell's genome. The cell treats the virus DNA as if it were its own. It reads the virus genes, using them to make new viruses, and when the cell copies its own DNA before reproducing, it also copies the virus DNA and passes it on as well. [2:15-2:41]

Actually, that's the definition of an endogenous virus, not a retrovirus. A retrovirus works backward from other viruses, which is what makes it "retro" as we saw in this month's feature article. But, the important point of their argument depends upon the virus being endogenous rather than being retro, so their confused definition doesn't affect their argument.

> In mammals, modern retroviruses usually infect white blood cells. If, however, a retrovirus happens to infect a sperm cell or egg cell, and if that sperm or egg cell ends up participating in fertilization, the resulting child will have a copy of virus DNA in every single one of her cells. She'll even pass it on to her kids if she has children. [2:42-3:04]

This is the first hint of their upcoming argument based on improbability. It is a double-edge sword which will cause a self-inflicted wound when Clearly Stated later tries to make the argument that the DNA of the common ancestor of chimps and humans was infected in thousands of places by retroviruses. Remember, when they try to make that argument later, they just said retroviruses usually infect white blood cells, not sperm or egg cells. Their argument depends on "if" sperms or eggs that are lucky enough to result in fertilization are unlucky enough to get infected.

> Now, you might think this is a guaranteed death sentence for the child, but the immune system can sometimes handle the problem. Normal copying errors in virus DNA can also shut a virus down. [3:05-3:16]

Like any other parasite, if it is too deadly, it kills the host, thereby killing itself, preventing itself from spreading. So, the virus depends upon the immune system, and normal copying errors, to cripple the virus enough to keep it from killing the host. Isn't it lucky that the immune system and unreliable reproduction quickly disabled so many viruses in our DNA before they could kill us?

> In these cases, a retrovirus insertion can be thought of as a single, giant mutation for the host. As is the case with all mutations, a retrovirus insertion might have a negative effect on the individual that contains it, it might be neutral, or, with a bit of luck, it could end up being beneficial. [3:16-3:34]

This is the classic evolutionists' claim that mutations can be beneficial. It takes more than "a bit" of luck. Mutations are so rarely beneficial that it takes "a whole lot" of luck.

Furthermore, there is a difference between a mutation being beneficial and being creative. The classic argument evolutionists have used in the past is sickle cell anemia. If a mutation causes red blood cells to be distorted into a shape like a sickle, they can't transport oxygen as well as normal blood cells. That's bad. But, in areas where malaria is present, malaria can't infect the misshapen red blood cells as easily, either. So, the argument goes, sickle cell anemia can be beneficial in areas where malaria is common, which is why sickle cell anemia is most common in people who live where malaria is rampant.

There is an important difference between "beneficial" and "creative." Darwinian evolution depends upon creative mutations—not beneficial ones. Darwinian evolution depends upon a creative mutation that creates blood cells which will take oxygen to internal places in the body that aren't directly exposed to air. There is a big difference between an existing blood cell changing shape and a blood cell suddenly appearing out of nothing (to say nothing of a heart and blood vessels suddenly appearing to move the blood cells around).

> Future virus mutations can give new functions, some of which might happen to be useful. [3:41-3:46]

That's just wishful speculation without any experimental proof.

> Recent studies have found in at least one case, it seems that an ancient mammal was infected with a virus that ended up aiding the animal in reproduction. Many of that early mammal's descendants, humans included, eventually became fully dependent on the virus gene. We can no longer reproduce without it. [3:46-4:04]

It might seem that way to Clearly Stated, but that doesn't mean it is true. Just how did that full dependence eventually come about? If we could survive without the infection before, why do we need it now? If we can't survive without it now, how did we survive before the infection?

> We are part virus. [4:04]

Ponder that statement. What does it mean? Why would they say that? What does that say about the dignity of man? There must be a reason why that sentence was included in the presentation. You can draw your own conclusion as to what the reason is.

Here is the key point in their presentation:

> It turns out that the human genome contains thousands of endogenous retrovirus segments, long stretches of DNA with sequences that match those of retroviruses. Luckily for us, none of ours can still make full-fledged viruses. They have simply mutated too much to perform their original virus-y functions. [4:19-4:38]

How much of that statement is fact, and how much is speculation? It is true that there are many (perhaps thousands of) segments of the DNA molecule that bear a strong resemblance to a virus—but they aren't actually viruses because they don't perform "virus-y functions." Because they look a lot like (but not exactly like) viruses, they assume that they were viruses once-upon-a-time, but have changed since then. It was so very lucky that thousands of viruses invaded egg or sperm cells (instead of white blood cells, like they usually do), and so very lucky that they mutated to lose their harmful nature before they killed our ancestors.

> An endogenous retrovirus is a stretch of DNA found in your DNA that got there when one of your ancestors was infected by a retrovirus. [4:51-5:00]

That bold assertion is simply speculation. Not only that, it is a definition designed to support a logically invalid debate trick called "circular reasoning." If an endogenous retrovirus is defined to be a stretch of DNA found in your DNA that got there when one of your ancestors was infected by a retrovirus, then the existence of endogenous retroviruses in DNA is proof that one of your ancestors was infected by a retrovirus. That is a classic logical fallacy because the conclusion is simply a restatement of the premise.

> On rare occasions, virus genes find their way into sperm and egg cells where they can go on to become a permanent part of a species genome. [5:00-5:09]

If it only happens "on rare occasions," why are there thousands of them in our DNA?

> Your endogenous retroviruses act as historical records of past infections suffered by your ancestors. [5:09-5:15]

No, they aren't "historical records." They are incorrect interpretations of something that was not historically observed.

> Now at this point, you might be asking, "How do we know for sure that genes with similar sequences to virus genes actually came from viruses?" [5:16-5:25]

That's a really good question. Their answer is not very good.

> Has this been experimentally demonstrated? In several different cases, yes. Scientists recently took human cells incubated in petri dishes and slightly mutated the DNA of one of our endogenous retroviruses to see if it would start reproducing viruses again. Sure enough, it worked. An extinct virus was revived from a DNA sequence found in our very own human genome. [5:25-5:50]

Scientists intentionally manufactured a virus by taking a segment of DNA and changing it. That isn't experimental verification that a virus invaded a sperm cell and accidentally mutated to lose its original functionality. If I take a TV set and modify it to become a radio, that isn't experimental verification that a radio luckily turned into a television.

> Remember, your endogenous retroviruses show you the unique history of specific virus infections suffered by your ancestors. They are like scars in our DNA that an individual acquires during its lifetime and can pass on to his or her descendants, but only his or her descendants. [6:36-6:53]

That's poor argument because it confuses scars (an acquired characteristic) with an inherited characteristic. A girl with a heart tattoo on her breast won't give birth to a baby girl with a heart tattoo on her breast. Scars aren't inherited characteristics. An analogy using a genetic disease would have served them better.

> If humans and chimps share a common ancestor, and if at least some of the infections we find in our genome occurred before the chimp/human split, we should find the same virus genes in the exact same locations in both human and chimp genomes. In contrast, if humans and chimps are not related, they should not share the same history of virus infections. Now, of course, it is possible that throughout history both species, humans and chimps, were infected by some of the same viruses. Humans and chimps sometimes get each other sick today. [7:02-7:33]

The fixed-species view doesn't depend upon luck to cause the same sequences to appear in the same places. This underhanded debate trick is called the "straw man argument." They misrepresented the fixed-species view in order to refute it. The fixed-species view is that humans and chimps share a common designer, so it is natural to find the same "virus" genes in the exact same locations in both human and chimp genomes. It is the result of design—not luck.

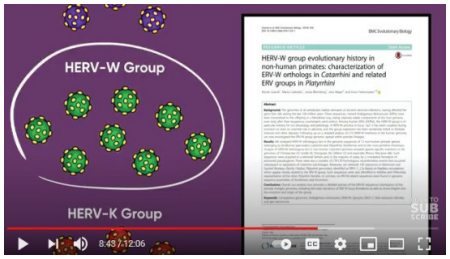
Remember, these stretches of "virus" genes aren't really viruses—they just look a lot like viruses which no longer "perform virus-y functions." [4:38] Like "junk DNA" (which scientists used to believe had no function) these stretches of DNA perform some functions they admit we "eventually became fully dependent" [4:04] upon.

They later repeated the false argument that the fixed-species depends upon luck (rather than design).

> But if chimps and humans are not related, those virus genes will not be found in identical locations of both chimp and human DNA. This is because when a retrovirus infects a host there are many different spots in a host genome where it might end up inserting itself. Extensive lab experiments with retroviruses have found that there are far more than 10 million possible insertion spots in the human genome. In other words, the chance of a human and a chimp getting infected in the exact same spot by the same specific type of virus is far less than one in ten million. [7:33-8:07]

We agree that the probability of humans and chimps getting infected at the exact same spot is too small to be the result of chance. It didn't happen by chance. It is evidence of design, consistent with the fixed-species view.

> They found that we share not just one, not just twelve, but 205 insertions; 205 insertions out of 214 for this particular virus group [presumably HERV-W based on the graphic at 8:43]. This makes perfect sense if we consider the evolutionary view of life. The 205 shared viruses were inserted sometime before the chimp/human split. The six insertions unique to humans and the three unique to chimps either represent insertions that happened after the split, or they represent deletion mutations that removed a few viruses in just one lineage after the chimp/human split. [9:12-9:49]



Or, more likely, the 205 shared segments are evidence of common design, and the nine differences represent either random mutations or intentional genetic differences which make us different from chimps.

> In contrast, if we want to believe the fixed-species view, we are forced to conclude these viruses are simply shared by coincidence. [9:50-9:57]

No, we aren't forced to that obviously false conclusion. We can reasonably conclude that these segments of DNA, incorrectly assumed to be viruses (which aren't virus-y any more) were put there by a designer for a purpose which they say we can't live without. [4:04]

It Doesn't Add Up

Their reasoning doesn't add up. Let's review their presentation again.

They began by saying that viruses usually infect white blood cells, not eggs or sperms. That makes sense. White blood cells fight infections, so white blood cells naturally would come in contact with viruses as they travel throughout the body to the site of infections. Eggs and sperms are tucked away safely inside the body where they aren't likely to come in contact with a virus. It

makes perfect sense that viruses would rarely infect eggs or sperms.

Despite this, they say it happened thousands of times before the alleged split between man and apes. They gave 214 examples for just one "virus group." The nine differences for that virus group must have happened more than 5-6 million years ago, or maybe 11-14 million years ago, or possibly 30 million years ago (depending upon which evolutionist you believe [17]) since apes and humans split.

But wait! The nine different rare "viral infections" (in this one group alone) must have happened almost immediately after the supposed split because all modern apes and humans inherited these nine differences. What are the odds of that?

In the 6 to 30 million years evolutionists believe have passed since men and apes split, why aren't there different viral infections in different races of men? If the evolutionists' racist belief that white men evolved out of Africa from Negroes millions of years ago is true (which, of course, it isn't) then different retroviruses could be used to calculate the time when whites and blacks split.

Benefit of a Doubt

Red herrings, circular logic, and straw men are techniques often used by dishonest debaters as ways to cheat their way to victory—but I don't think that is the case here. I think Clearly Stated is simply ignorant of the creationists' position, and guilty of projection.

"Projection" happens when people assume other people have the same beliefs as they do, and project their own beliefs and motives on others.

The most obvious example of projection involves "affirmative action." Liberals believe affirmative action is necessary because blacks haven't evolved as much as whites, and therefore can't compete on a level playing field. They insist whites must be handicapped to make it fair. Therefore, when conservatives oppose affirmative action, liberals project their own racist beliefs on conservatives, and think that conservatives are trying to promote white supremacy. When conservatives call for law and order, liberals project their own racist view that most black men are criminals onto conservatives, and mistakenly believe conservatives are pro-police because they are anti-black.

I believe Clearly Stated innocently (but mistakenly) projected their belief (that retrovirus infections occurred in random places on DNA) onto scientists who believe the fixed-species view. This leads them to think that fixed-species scientists foolishly believe the existence of all these retroviruses in the same sections of DNA must be the result of incredibly improbable coincidence. Their probability calculation is irrelevant because fixed-species scientists don't believe it happened by chance.

Scientists who take the fixed-species view agree that retrovirus coincidences can't possibly be the result of luck, which is what convinces them the similarities are evidence of design. Clearly Stated doesn't know enough about the fixed-species view to realize that. Clearly Stated projected their own erroneous belief that retroviruses are the result of luck onto creationists, and used comedian Jim Carey's words to mock creationists for believing something they don't believe.

I don't think the producers of the Clearly Stated video are intentionally lying about fossils to create an irrelevant red herring argument—they are just repeating the misinformation they have heard in schools which teach only one side of the creation/evolution controversy. That's why it is important to teach both sides in public schools.

People who use circular logic often don't recognize the logical fallacy. Clearly Stated's belief that retroviruses got there when one of our ancestors was infected by a retrovirus is unquestionable, so they blindly accept the notion that the existence of retroviruses is proof of infection.

Think About It

Like everything else the evolutionists say, it makes sense until you think about it. That is because, like everything else evolutionists say, it is based on speculation, not experimental confirmation. It can't be proved experimentally because it isn't true.

[17] https://theconversation.com/when-humans-split-from-the-apes-55104#:~:text=It%20was%20even%20suggested%20that%20humans%20had%20split,making%20our%20evolution%20a%20very%20long%20process%20indeed

by Lothar Janetzko

Institute for Creation Research

www.icr.org

ICR's Approach to Scientific Investigation

The website review for this month looks at the website of the Institute for Creation Research. If you perform a web search for information about the creation versus evolution controversy you will probably find links to their site.

The main page of the site provides tab links to the following topics: 1) About us; 2) News; 3) Publications; 4) Media; 5) Events; 6) Give; and 7) Store.

It is on the About us link, that you can find information about the Institute. "After 50 years of ministry, ICR remains a leader in scientific research within the context of biblical creation. Founded by Dr. Henry Morris in 1970, ICR exists to conduct scientific research within the realms of origins and Earth history, and then to educate the public both formally and informally through professional training programs, through conferences and seminars around the country, and through books, magazines, and media presentations." The three main purposes of ICR are to conduct research, offer formal courses of instruction, seminars, and workshops, and communicate the evidence and information related to its research and education by the production of books, videos, periodicals, and other media.

The News link provides articles for the present week and links to past articles. Information is also provided on the availability of a free mobile app for Apple and Android devices.

By selecting the Publications link you will find information about *Acts & Facts*, "a full-color monthly magazine with a readership of over 250,000, providing articles relevant to science, apologetics, education, and worldview issues." You will also find a link to subscribing to this free publication. Links to technical papers and books can also be found here.

On the Media link, you find links to short videos on various topics to watch, Podcasts, and DVD series that are available for purchase.

Since ICR is a federally recognized 501(c)(3) nonprofit ministry, as you learn on the Give link, all donations to ICR are tax deductible and are greatly appreciated to continue the ongoing work of this organization.

The Store link will guide you to the material that has been published by ICR over many years. You will find books on Fossils, Dinosaurs, Ice Age, Flood, Climate Change, and other topics. Recommended books are available for purchase, and other material is available for downloading or in ebook format.

The main page of the website presents snippets of information from the various link pages discussed above. Each snippet describes where you can find more detail about the information such as NEWS, ACTS & FACTS, APOLOGETICS, and VIDEOS.

One additional link you can find on the home page is about the ICR Discovery Center for Science & Earth History. This center is in Dallas, Texas, and is a museum which presents cutting-edge exhibits, planetarium shows, and live science presentations.

As always, there is much to explore on this site, just follow the many available links to find topics of interest.