

# Evolution 2.0 Newsletter

Volume 7 Issue 3

## Beatles, Stones, and a Brand New Field of Virus Research

Imagine you're heading to a campsite to hang out with your friends for the weekend. On the drive you hear "Hey Jude" by the Beatles and "You Can't Always Get What You Want" by the Rolling Stones on the radio.

Later, sitting around the campfire, munching s'mores and sipping beers, you start strumming your guitar and humming "*Hey Jude... you can't always get what you want...*" mashing the two songs together.

Everyone laughs and gets into the spirit. Soon it becomes the "meme" of the campout. The next morning everyone is still singing and joking around with it. When Ben complains that the breakfast coffee is too weak, Hannah sings, "Heyyyyy Ben...you can't...always get...what you wa-ant."

Later you decide to record this "mash up" and put it on TikTok. It goes *viral*. One hundred thousand plays. Then other people start making parodies and duets and it goes around the world.

Guess what... your silly mashup song **is** like a virus, and not just in the obvious way of "going viral." Here's what I mean...

If you ask most virologists if a virus laying on a kitchen table is alive, they will reply NO. Why isn't it alive? Because it just sits there. It could stay there for a thousand years and not move. It doesn't reproduce, it doesn't consume resources, doesn't excrete waste. It's just an assemblage of genetic material in an encapsulation of proteins.

But once a virus is **in somebody**, is it alive? Yes... we certainly treat it as living. The experience of the past three years should make that obvious to anyone.

Back to music. If you have a CD with "Hey Jude" on it, is the song alive?

The CD is not alive.

The speaker playing the song is not alive.

The song is just a collection of vibrations coming from your speakers.

But once the song gets inside your head, does it become alive? **Yes**. It makes you dance or cry. It transforms your mood. It mixes around in your brain with all the other thoughts in there. They change it. It changes them. It changes you. It changes culture. It changes conversations. It alters relationships. It attracts people to concerts.

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It is alive. When a song is written about something, we say it has been immortalized. As Carl Jung said, “People don't possess ideas. Ideas possess people.”

And... **who** wrote that mash up medley of “Hey Jude/You Can't Always Get What You Want”?

Did the song “Hey Jude” write it? No.

Did the song “You Can't Always Get What You Want” write it? Of course not.

**You** did. And what did you do? You took parts of two “viruses,” mixed them together, made a new virus and infected the world with it. Something *not* alive entered you, then became alive; it changed you and you changed it.

If you “fractal” your way down to the level of cells and viruses, this is exactly what's going on with *every* virus. Once the virus moves from the kitchen counter to inside you, the cells in your body begin modifying the virus and the virus in turn starts modifying them.

Exactly *what* it's doing and *why* it's doing it, we don't know. But what we do know is what happened during the pandemic. Variants like Delta and Omicron got more contagious and less lethal.

I harbor doubts that your body is trying to *help* the virus be *more contagious*... but it is modifying it. Any modification that is inherently more contagious is going to replicate more. That's gonna happen by selection alone.

As for the *less lethal* part, I absolutely think the human body is trying to modify the virus to make it less lethal. I believe our bodies say to themselves, “HmMMM, I can't stop the intruder, but can I modify him so he doesn't kill my children? Can I take away his gun? Can I distract him? Can I give him something else to do? What if the intruder breaks in and I give him a loaf of bread? Will he stop for a couple seconds and think about eating it, before he kills my children?”

The conventionally trained biologist will tell you this is BS. Just like in “regular” evolution, they will insist that the variants are caused by random copying errors and genetic recombination. The viruses and the cells do not have any intention or consciousness. It's happenstance.

In the world of “regular” evolution of organisms, the “random copying errors” framework is intellectually and scientifically bankrupt. It's fairly easy to prove this when you're talking about larger lifeforms. There just aren't enough of them, nor have they been around long enough, for “mistakes” to result in the evolutionary advancements we see.

But viruses? There are 10,000,000 viruses in **one drop of seawater**. Surely the numbers there are large enough for “mistakes” to eventually lead to advancement.

Has anyone looked into this?

I'll get to that in a moment...

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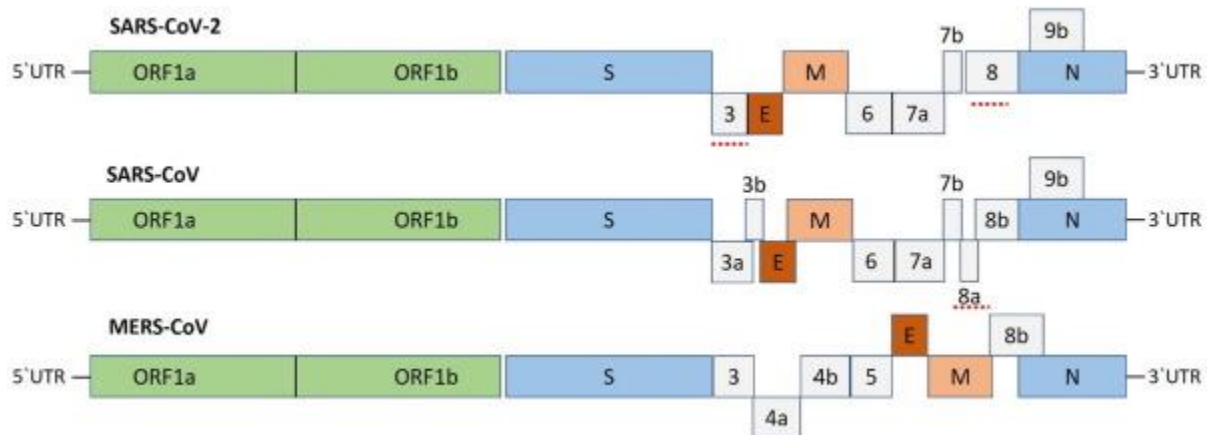
## The Journey to Natural Virus Evolution

In 2019 I hired publicist Kelly Sullivan to fire up interest in my \$10 Million Origin of Life Prize. Then nine months later, we all know what happened. So, two weeks into lockdown, Kelly says, “Perry, the media doesn't want to see *anything* unless it's about viruses. Surely, you must have something you can say about that?”

I said, “Um, no. But I’ll make you a promise: I will devote *one* entire day to this. I will dig in every direction and see if I can come up with something virus related. Maybe there is an Evolution 2.0 angle on viruses.”

So I started by watching YouTube videos about how Covid works. I grew tired of that pretty fast. Then I started emailing people and didn’t get much response.

But then I had a realization. I started looking at the diagrams that show what different viruses (SARS, MERS, COVID) look like. On April 7, 2020 I found this:



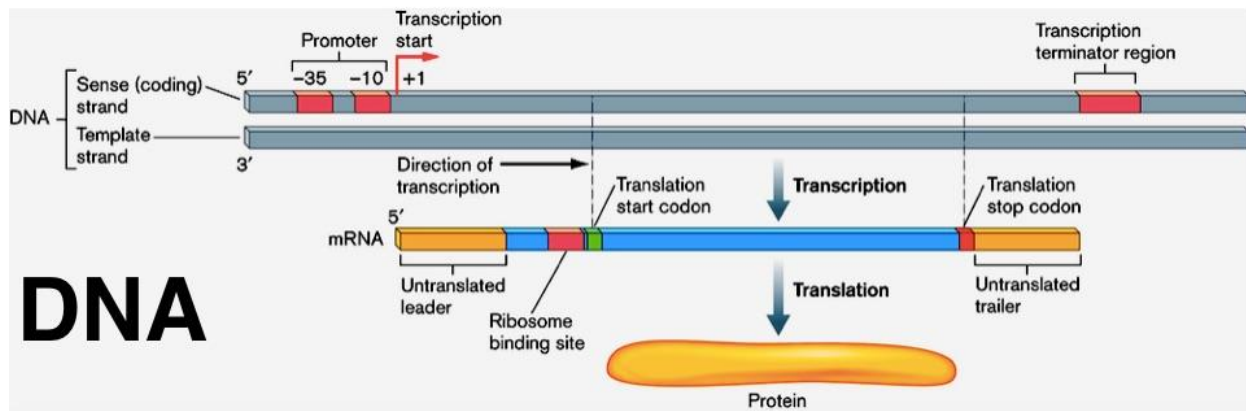
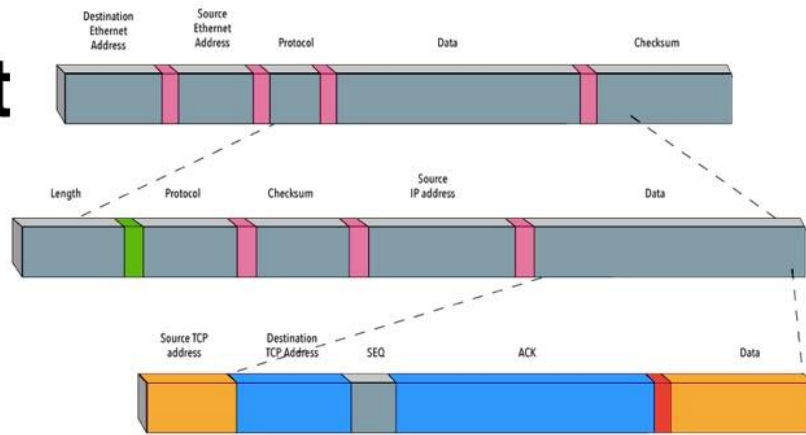
What you’re looking at here is COVID at the top, SARS virus of 2002 fame in the middle, and MERS from 2012. Notice how similar these are. But also notice how **modular** they are. Mers has “4a” “4b” and “5” but COVID and SARS do not. SARS has “3B.” COVID has “8” while the other viruses have “8b.”

I took one look at that and said, “Those regions are not random. Viruses don’t have the machinery to make changes like that. The *host* has to be making those changes.”

Comparison: In my \$10 million prize presentation at the Royal Society in 2019 I showed the slide below, illustrating how similar Ethernet packets are to segments of DNA.

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# Ethernet



Ethernet packets also look a lot like Barbara McClintock's corn plant cells purposely moving stuff around. She called them "transposons" and "transposable elements." Transposons for decades have been considered to be 'virus-like' elements of the genome, known to jump around perform weird tasks and exhibit selfish, purposeful behaviors.

The second diagram illustrates the epiphany I had in 2004 – "I've seen all this before, it's digital communication." It felt like *deja vu*. Viruses evolve the same way bacteria, corn and humans evolve... except for one thing: Bacteria, corn and viruses possess DNA editing machinery. Viruses don't.

So... who's editing the viruses?

## One Trail Dead-Ends While Another Blazes into View

At the same time I was musing on those diagrams, I got in touch with a scientist who was about to publish a paper that he said would prove COVID-19 was engineered in a lab. I probed him on this, but he wouldn't answer my questions because he was too busy.

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So I pulled in James Shapiro. Shapiro looked at what this guy was doing and said, “Perry, if he's right about this, then it's a very big deal.”

I had thought, “Oh great, this is a big story, I've got something for my publicist to use!” People were already arguing about whether C-19 was engineered in the lab or not. The CDC was taking a very hardline position that it was not. “Maybe I'm onto something here.”

But since the guy publishing the paper wasn't talking, I decided I was gonna have to figure it out myself. So I took some Evolution 2.0 funds, I went on Upwork and hired two virologists and two geneticists. Since the COVID genetic sequences were all online, I asked them to download those sequences, analyze them with genetic software, and see if they could reproduce the data in this guy's paper.

After a very involved and detailed analysis, we realized that he did not adequately explain his statistical methods for reaching his conclusions. He was making a case that bits of HIV had been inserted into COVID. But it turns out that these “insertions” were so short, you could find those same patterns anywhere. You could find them in a duck, goldfish or human.

Think of them like pieces of words that are only three or four letters long that appear in many different words. The three letters “ier” appear in Kiersten, lonelier and outlier. But it doesn't mean that those three words have any relationship to each other. So, it was impossible to conclude that COVID was engineered in a lab (based on his data).

Thus his paper did not show what it purported to prove. But by this time I was intrigued. Because there are not very many possible answers as to how these modifications, insertions, and transpositions were being made.

The virus could not be doing it itself, because a virus lying on a kitchen table does not possess machinery for editing or rearranging itself. And if these rearrangements are too large and too orderly to happen by accident, then there's only one answer left.

The HOST must be doing the heavy lifting!

That's when I pulled in radiologist Bill Miller, who has been down the same evolutionary rabbit hole as me (I interviewed him, listen at [evo2.org/bloodhounds-never-forget-a-smell](http://evo2.org/bloodhounds-never-forget-a-smell)). I asked, “Bill, is there any literature about this? These virus insertions remind me a lot of McClintock's corn plant diagrams. Has someone already gone down this path?”

Two weeks later, Bill called me back. “Perry, there are only needles in haystacks. They are spread out all over the place. There's all kinds of evidence that viruses engage in mutual engineering with their hosts, but there is no unified field of study.”

“Then Bill, let's create a new field of study.” We pressed forward with the help of geneticist Jennifer Head from Oregon.

After about a year we had a ton of data. I had spent as much time and money as I could justify. We had reached several dilemmas:

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One, that COVID was so hyper-politicized that it seemed unlikely that anyone would listen to us. Or if they did, we would be given cement shoes and tossed into an icy New Jersey river.

Another was that all this research was expensive. I had spent as much as I could reasonably justify on this. (Thank you VERY much to the Evolution 2.0 donors who made this possible.)

Another dilemma was that we looked all over the place looking for collaborators. Bill and I have zero credentials in virology, so a credible virologist would be a big help. But we just could not find any. We ended up kissing a lot of frogs. I remember one zoom call with a highly credentialed virologist from Europe who felt he might be willing to help... but then I got into an argument with him because he was still convinced that virus variations come from random copying errors.

“It’s mathematically impossible,” I argued, but he simply retorted that there are umpteen trillions of viruses so it’s inevitable that just about anything will eventually happen by chance. I couldn’t get him unstuck from his ‘monkeys with typewriters’ mindset so we moved on.

So, I thought, this project is dead until further notice.

A year went by.

Then one day I heard from Bill via email:

“Dear Perry, Arthur and Frantisek, I’ve written this here 80-page paper on virus evolution. I’d like you guys to help me finish it up and co-author it with me.”

**Arthur Reber** is a psychologist in Vancouver, **František Baluška** is a cell and plant biologist in Germany and the most ‘rock star’ scientist of the group by far.

All of us agreed to carry it across the finish line. We took COVID out of it completely, because we don’t want to get caught up in the political quagmire that still surrounds the pandemic. Our entire 80-pages of evidence drew from other viruses that nobody’s freaked out about. We argued that viruses and hosts engage in **Natural Viral Engineering** much the same way that humans engineer songs, poems, computer games, memes and TikTok videos.

Life is problem-solving, and cells and viruses problem-solve together. Our approach to evolution is directly in conflict with the mainstream. Very much like the cancer evolution project.

We submitted it to a journal. They liked it, but rejected it because it was too far outside their areas of specialty. We submitted it to a new journal... then waited over a year as it descended into Peer Review Purgatory.

Suddenly, about three months ago, we heard back: “We like it, and are asking for some edits.”

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Bill made the edits. The paper has now been released. It is called **Viral-Cellular Natural Engineering in Cognition-Based Evolution** and is published in *Communicative & Integrative Biology*, May 2023. You can read it at <https://tinyurl.com/naturalviralengineering>.

The four of us believe cells have some form of self-awareness. We do not attempt to answer the question whether a virus laying on the kitchen table is alive, but we do show that a virus in a host is every bit as alive as any cell in your body. A virus becomes a part of the cells it inhabits, and it's just as much a part of that cell as the cell's own DNA. The collective symbiotic organism functions differently than one without a virus.

For example, we know that a mouse with a certain virus will not get sick when infected with a particular bacteria; but a mouse that does not have that virus *will* get sick from the same bacteria.

Viruses form an integral part of the landscape of life on earth. They are the Open Source code repository for evolution. Organisms steal code from viruses and use it, much like a Linux programmer borrows and uses free code from hundreds of thousands of other programmers online. (Open Source software caught fire 20 years ago and today just about every web server online and innumerable other devices like Android phones run on the free Open Source Linux Operating System.)

I believe our paper is the first paper to accurately explain how viruses evolve in a wide context. And I also believe that this is the beginning of a whole new field of virology which I call Natural Virus Engineering.

I predict that future research will show that COVID-19 has forced the human body to evolve in ways we do not currently appreciate. I believe some of them will be evolutionary steps forward. It may be an upgrade to the immune system. It may be equipping the human body to perform some function it could not perform before.

It's speculation, but I think it's inevitably true. And I think there could be ten Nobel Prizes on the way to this truth.

How could this insight not be worth \$400 million? How could this not convey \$4 billion or \$40 billion worth of value in the world?

And yes, it's *directly* related to cancer. The same mistakes are being made in virology as were already being made in cancer research. The science profession has gravely underestimated our opponent. It has embraced an incorrect definition of cancer and viruses. The field is wasting money.

Science Research 2.0 is not wasting your money. It's hard at work solving the biggest health problems on the planet.

Thanks to the generosity of Evolution 2.0 donors back in 2020, and the tireless work of Bill Miller, we are literally witnessing the genesis of a new field of virology, created by part-time renegades who had the mojo to challenge the status quo. We are doing work that others are unwilling or unable to do.

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You can access our full paper “Cellular and Natural Viral Engineering in Cognition-Based Evolution” at <https://tinyurl.com/naturalviralengineering>.

Will you continue to support us? Donate at [www.evo2.org/cancer](http://www.evo2.org/cancer)

Seize the day,

Perry Marshall

## What to Do Next

- Contribute to Science Research:  
Donate at [www.evo2.org/cancer](http://www.evo2.org/cancer)
- Our Manifesto is posted online at:  
<https://reversingcancer.org/donation-fundraising-letter>  
The password is: now
- Our podcast is at <https://evo2.org/the-podcast/> and blog <https://reversingcancer.org/blog/>
- Contact us at [support@reversingcancer.org](mailto:support@reversingcancer.org)
- WE ARE HIRING! Please introduce us to a fundraising professional who is looking for an opportunity. Contact our CEO Jon Correll at [support@reversingcancer.org](mailto:support@reversingcancer.org).

## We Need Your Helping Hands

Evolution 2.0 is me, CEO Jon Correll, Mary McEvoy and a few other precious volunteers to contribute hours here and there. **We can use your hands-on assistance.**

Another thing you can do to help is fund our virus research. I know of no one who is bringing a full-fledged “Evolution 2.0” viewpoint on virus evolution. It’s 501c3 not for profit, so you can go to [evo2.org](http://evo2.org) and make a tax-deductible donation.

We could also use some volunteers...

- **Administration and project management**
- Finances
- Scientific papers, research, and projects
- Film (documentary screenwriters, editors)
- **All** forms of marketing ad copywriting, buying Google, YouTube and Facebook traffic, writing blog posts, shooting videos, podcasts, publicity angles, news media
- Project management

Email [evolution@evo2.org](mailto:evolution@evo2.org) and let us know what your skills are and how you might like to help.

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