



A Short History of Virology

This article is pulled from the 15 day [Troubles Away](https://www.troublesaway.net) program of short videos and games designed to remove troubles from your life.

Considering recent global events does a short history of virology support the central insight of Troubles Away, namely that troubles appear when we believe in something that is not true?

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Virology is the study of viruses. Virologists define viruses as

*replication-competent intracellular parasites capable of causing disease in a host such as a human.*¹

In other words a virus has the ability to reproduce itself, operates as a parasite on a host and in doing so causes disease.

The central problem for virology is that there is no scientific evidence that any particle that meets such a definition exists.² In the words of Dr Thomas Cowan et al.:

*Perhaps the primary evidence that the pathogenic viral theory is problematic is that no published scientific paper has ever shown that particles fulfilling the definition of viruses have been directly isolated and purified from any tissues or bodily fluids of any sick human or animal. Using the commonly accepted definition of "isolation", which is the separation of one thing from all other things, there is general agreement that this has never been done in the history of virology.*³

How did this state of affairs arise?

If you are a scientist and you want to confirm that you have a particle that creates a disease you would follow the scientific method by:

1. Purifying the particle in question. In other words, separate this particle from everything else;

¹ Dr Mark Bailey *A farewell to Virology* p.4 <https://drsambailey.com/a-farewell-to-virology-expert-edition/>

² <https://drsambailey.substack.com/p/reiner-fuellmichs-coronaviruses> 0:50 seconds.

³ Thomas Cowan, et al., "The 'Segling the Virus Debate' Statement", 14 Jul 2022: <https://drsambailey.com/resources/segling-the-virusdebate/>

2. Run an experiment where you add this particle to a host and see if it creates a disease;
3. As a fundamental component of your experiment have a control that is the exact same as the experiment with the particle in every way but without the particle.

If you found that the host in the experiment that contained the particle became diseased while the host in the control experiment did not you would confirm your hypothesis that this particle is the cause of disease in the host.

As we are about to discover in this short history no such experiment has ever taken place in the entire history of virology. Critically:

- no particle with the characteristics of a virus has ever been purified;
- no experiment has ever been performed with a valid control (i.e. the same experiment without the purified virus).

You can see why there have never been any experiments with valid controls – in order to have a scientifically valid control you first have to purify the particle. If you can't purify the particle you can't create a control that is exactly the same as the experiment except without this particle.

The purification of the particle proves you have something that exists.

The ability of your purified particle to cause disease while a control without the particle does not supports the hypothesis your particle is the cause of that disease.

Coping Strategies

In order to function in a profession where there is no scientific proof a particle with the characteristics of a virus exists, virologists employ two main coping strategies.

Change Language

Virologists change the meaning of words so that it appears they are dealing with a proven particle with the characteristics of a virus. For example, the common use of the word *isolate* means to separate something from everything else. But because virologists have not done this with any alleged virus, in the language of virology *an isolate* now means any sample that *is assumed* to contain a virus.

Far Far Away...

Each new paper claiming to have *isolated* a virus references previous papers that also claim to have *isolated* viruses. This continues right back to the first papers. As we shall see below, the pushing of the evidence that a virus has been purified gives the appearance of credibility but when investigated, provides no substance.

The Far Far Away approach is given greater credibility with the use of genome databases like GenBank⁴ where hypothetical DNA and RNA sequences of alleged virus are stored. All of these sequences are *in silico*, that is, computer generated models. None have ever been purified from a

⁴ <https://www.ncbi.nlm.nih.gov/genbank/> For flu sequencing see: <https://gisaid.org/>

diseased organism. None have been demonstrated through experiments with proper controls to cause a disease. However, the ability to reference back to a database gives credibility to virologists who want to claim they have discovered a new virus based on a previously uploaded, purely hypothetical, genome sequence.

For example Dr Mark Bailey describes:

a branch of one of the imaginary coronavirus template trails leads back to one of the original claims made regarding the SARS-CoV genome, alleged to be the cause of the first SARS “outbreak.”

In April 2003, Yijun Ruan et al. submitted to GenBank their, “SARS coronavirus Sin2500, complete genome,” which became accession number AY283794.1.

However, this genome was invented not by directly sequencing alleged viral particles of course but by sequencing the RNA in a Vero cell culture experiment through, “both shot-gun and specific priming approaches,” with alignment to, “the mouse hepatitis virus genome sequence (NC_001846) as a backbone.”¹¹¹

The NC_001846.1 genome was invented in turn in 1997 and was claimed to be derived from a virus that was, “obtained originally from Dr. Lawrence Sturman,” and sequenced, “using as templates, cytoplasmic RNA extracted from L2 cell monolayers infected with wild type MHV-A59, C12, C3, C5, C8, B11, or B12.”¹¹²

The assertion that they started with a virus appears to be based on Dr Sturman’s assurance that the sample he provided contained such a thing.⁵

In other words virologists cope with the lack of evidence that any particle with the characteristics they define as a virus by pushing the alleged proof of such a particle into the distant past.

Early Discoveries

In 1884, the French microbiologist Charles Chamberland invented the Chamberland filter (or Pasteur-Chamberland filter) with pores small enough to remove all bacteria from a solution passed through it.⁶ Virologists claim the discovery of a virus when early experiments using the filter showed that a fluid remained infectious when it was passed through the filter. In other words, because bacteria had been filtered out of the fluid it was *assumed* that some other agent, small enough to pass through the filter was the cause of the disease.

For example Dmitri Ivanovsky described this process in his 1903 treatise *1903 Über die Mosaikkrankheit der Tabakspflanze* (About the Mosaic Disease of the Tobacco Plant)⁷ However as outlined above the filter process does not purify any particle alleged to be a virus.

Because no virus was purified Ivanovsky was not able to have a proper control of just the filtered fluid without the virus. However this does not stop virologists claiming Ivanovsky discovered the Tobacco Mosaic Virus.

⁵ Dr Mark Bailey *A farewell to Virology* p.36 <https://drsambailey.com/a-farewell-to-virology-expert-edition/>

⁶ <https://en.wikipedia.org/wiki/Virology>

⁷ Dr Mark Bailey *A farewell to Virology* p.15 <https://drsambailey.com/a-farewell-to-virology-expert-edition/>

In 1911 Peyton Rous at the Rockefeller Institute in New York published a paper called *A Sarcoma of the Fowl* using the same filtration method. In this case Rous ground up chicken tumours, filtered them and injected the material into other chickens. When some of the injected chickens also grew tumours Rous postulated the presence of a causative ultramicroscopic organism. In 1966 Rous was rewarded with a noble prize for *his discovery of tumour-inducing viruses*.⁸

From a scientific point of view all that Rous was able to show was that if you inject fluid from chicken tumours into other chickens these other chickens can also develop tumours. No particle with the characteristics of a virus was ever purified. Rous had a control which consisted of the unfiltered tumour material but as you can see this is no control at all. A valid control would be the exact same fluid but without the virus.

In 1954 John Enders and Thomas Peebles added throat washings and blood to cell cultures. As they saw the cells dying and breaking down they claimed *this group of agents is composed of representatives of the viral species responsible for measles*.⁹

I hope you are getting the idea. As before no viral particles are ever purified. Because they have no viral particles Enders and Peebles could not run a proper control for their experiment by watching what happened to their cell cultures when the same throat washings and blood without the alleged virus were added to cell cultures.

Try for Yourself

Now that you understand the fiction virology represents you may like to have a go revealing it for yourself from the following examples:

1. French-Canadian microbiologist Félix d'Herelle described viruses that, when added to bacteria on an agar plate, would produce areas of dead bacteria.¹⁰
2. Another breakthrough came in 1931 when the American pathologist Ernest William Goodpasture and Alice Miles Woodruff grew influenza and several other viruses in fertilised chicken eggs.¹¹
3. In 1983 Luc Montagnier's team at the Pasteur Institute in France, first isolated the retrovirus now called HIV.¹²

A. F. Chalmers in his book *What is this thing called Science?*, says one of the pivotal issues with virology was that it invented itself as a field before establishing if viruses actually existed:

In this instance, a virus particle was not observed first and subsequently viral theory and pathology developed. Scientists of the mid and late nineteenth century were preoccupied with the identification of imagined contagious pathogenic entities. The observations of the naïve inductionist did not identify a virus a priori, and then set about studying its properties and characteristics. The extant

⁸ Dr Mark Bailey *A farewell to Virology* p.15 <https://drsambailey.com/a-farewell-to-virology-expert-edition/> quoting: "The Nobel Prize in Physiology or Medicine 1966": <https://www.nobelprize.org/prizes/medicine/1966/summary/>

⁹ Ibid page 17.

¹⁰ <https://en.wikipedia.org/wiki/Virology>

¹¹ Ibid.

¹² Ibid.

presupposition of the time was that a very small germ particle existed that may explain contagion. What came thereafter arose to fulfil the pre-suppositional premise.

Dr. Mark Bailey comments:

Because a scientific theory demands evidence that has repeatedly been tested and corroborated in accordance with the scientific method, it is clear that “viruses” never even reached the stage of a theory. According to the science, they remain mere speculation.¹³

Troubles [fade](#) when we stop believing in things that are not true.

¹³ Dr Mark Bailey A farewell to Virology p.20 <https://drsambailey.com/a-farewell-to-virology-expert-edition/>