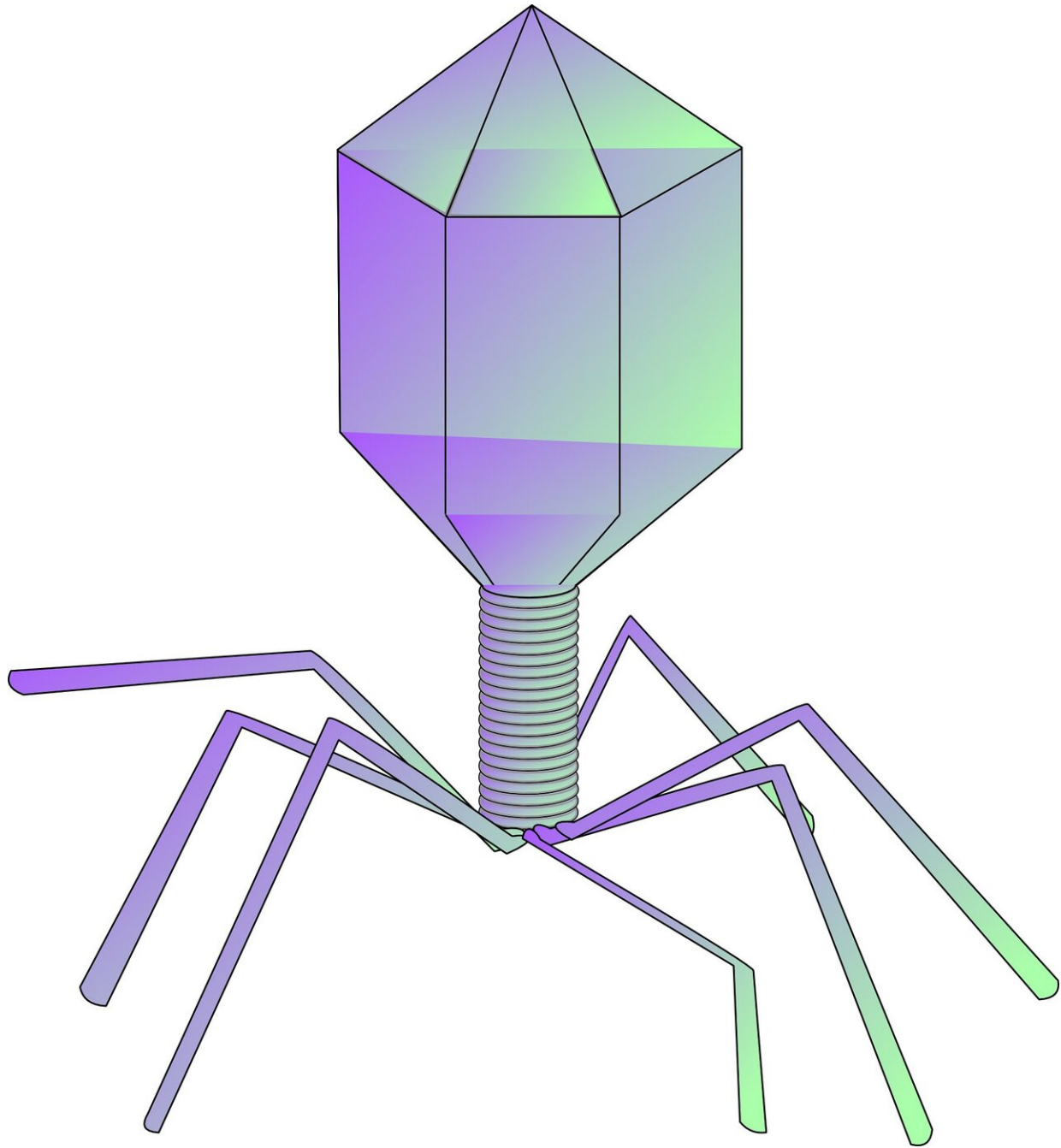


Forgotten tale of phage therapy history revealed

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Credit: CC0 Public Domain

In the current situation when the fear of virus infections in the public is common, it is good to remember that some viruses can be extremely

beneficial for mankind, and even save lives. Such viruses—phages—infect bacteria. The research conducted at the University of Jyväskylä sheds some light on phage therapy history. It revealed that Brazil was a strong user and developer of phage therapy in 1920-40's. The research was published in *Lancet Infectious Diseases* on March 2020.

After decades of antibiotic use and misuse, natural selection is giving bacteria the upper hand. The World Health Organization (WHO) warned that we are reaching the post-antibiotic era. As more pathogens become resistant, our chances to find new antibiotics diminish. Therefore, alternatives are urgently needed.

Use of phages, viruses that kill bacteria as therapeutics, was developed in Paris around 1920. Since these viruses could be safely used to treat patients, [phage therapy](#) quickly spread, but then slowly disappeared from the western world decades later, as antibiotics became common. Now, the revival of phage therapy is considered one viable solution to the antimicrobial resistance crisis.

Researchers of the University of Jyväskylä investigated a forgotten hotspot of phage therapy of the past. Historical medical records in Portuguese (1915-1952) revealed that Brazil was a strong user and developer of phage therapy. From pioneer mass testing of phage products to routine use, details have been uncovered about the safe use of phages against dysentery and staphylococcal infections. This information was made available to the modern research community by a historical review publication.



Research focused on historical medical records from 1915 to 1952. Credit: The University of Jyväskylä/Gabriel Almeida

The practical and [clinical data](#) revealed can be important to shape modern phage therapy against acute dysenteric infections and against dangerous resistant pathogens such as MRSA.

"The literature researched was an interesting trip to the past. This work is in principle as a historical review, but it also provides [relevant information](#) to modern researchers. It might be an incentive to similar investigations in other countries, besides being a spark of hope to the recent Brazilian research community," says Postdoctoral Researcher Gabriel Almeida from the University of Jyväskylä.

More information: Gabriel Magno de Freitas Almeida et al, The forgotten tale of Brazilian phage therapy, *The Lancet Infectious Diseases* (2020). [DOI: 10.1016/S1473-3099\(20\)30060-8](https://doi.org/10.1016/S1473-3099(20)30060-8)

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