

# Molecular Virology is the Study of Viruses at the Level of Nucleic Acids and Proteins

#### Azar Nafisi\*

Department of Biochemistry, University of Tehran, Iran

## **INTRODUCTION**

The medical take a look at of biological viruses is known as virology. It is a subfield of microbiology that specializes in their detection, shape, type, and evolution, as well as how they infect and use host cells for reproduction, how they interact with the physiology and immunity in their hosts, the illnesses they reason, how to isolate and culture them, and the way they are used in medication and research. He found out that the hassle failed to come from a bacterial or fungal infection but as an alternative from something absolutely extraordinary.

#### DESCRIPTION

There had been no techniques for separating proteins from viral nucleic acids (RNA and DNA), which are now the mainstay of virology. There are now a variety of approaches to examine viruses and their parts to look how they paintings and the way they appearance. There are presently thousands of awesome viruses, and virologists often focus on the viruses that infect animals, microorganism, and other microorganisms, or plant life. Medical virologists are now reading viruses that infect people. Biology, health, animal welfare, agriculture, and ecology are all blanketed inside the wide area of virology. Because viruses are obligate intracellular parasites, they are able to best reproduce in the residing cells in their hosts that are required for his or her cultivation in the laboratory. Cells grown in cellular cultures in the laboratory are utilized for viruses that infect animals and are commonly referred to as "animal viruses." Previously, the viruses have been grown at the membranes surrounding the embryo using fertile chicken's eggs [1]. Some vaccines are still made the use of this approach. Bacteria growing in check tubes can be applied immediately for the bacteriophage viruses that infect bacteria. For plant viruses, the natural host vegetation may be used, or so-called indicator plants may be used, which display signs and symptoms of contamination extra actually, in particular while the contamination isn't obvious.

By causing harm to the host cellular, viruses which have grown in mobile cultures can be detected not directly [2-4]. These cytopathic effects are often particular to the virus kind. For example, the cells, typically human fibroblasts that herpes simplex viruses infect showcase a different "ballooning." Some viruses, just like the mumps virus, cause bird pink blood cells to strongly bind to the infected cells. "Haemadsorption" or "Hemadsorption" refers to this. Plaques, which might be localized "lesions" in mobile layers that a few viruses produce, are beneficial for quantitation assays and plaque reduction assays for figuring out the species of the virus. The study of viruses on the protein and nucleic acid levels is known as molecular virology. In virology, all the strategies evolved through molecular biologists had been a hit. These techniques are perfect for reading viruses due to their small sizes and relatively straightforward systems. Because viruses are obligate intracellular parasites, they can most effective reproduce within the living cells in their hosts, that are required for his or her cultivation inside the laboratory. Cells grown in cellular cultures in the laboratory are applied for viruses that infect animals and are generally known as animal viruses.

# CONCLUSION

Previously, the viruses had been grown on the membranes surrounding the embryo the usage of fertile bird's eggs. Some vaccines are nonetheless made the usage of this technique. Bacteria developing in test tubes can be applied without delay for the bacteriophage viruses that infect microorganism. For plant viruses, the herbal host plants can be used, or so-called indicator plants can be used, which show signs and symptoms of infection greater simply, especially when the infection isn't apparent.

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Corresponding author Azar Nafisi, Department of Biochemistry, University of Tehran, Iran, E-mail: Nafisi@yahoo.com

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# **CONFLICT OF INTEREST**

The author declared no potential conflicts of interest for the research, authorship, and/or publication of this article.

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