

Launch of VirHoX project: a new insight into virus-host associations

FIZnews

Karlsruhe, January 31 2025 — The VirHoX project has been launched and opens up new possibilities in the research of viruses and their host organisms with innovative approaches. The newly developed VirHo-seq method aims to make previously unknown connections between viruses and hosts visible.

VirHo-seq focuses on a crucial moment in the infection cycle of viruses: the translation of viral genes into proteins by the host cell. During this process, viral mRNA and ribosomal RNA of the host combine. These connections are made visible by specially developed enzymes and analyzed using high-throughput sequencing. This makes it possible to identify virus-host associations that were previously hidden.

One important area of application, for example, is the rapid response to newly emerging pathogens, as was the case with SARS-CoV-2. The ability to quickly identify which organisms serve as hosts for a new virus is crucial for understanding transmission pathways, containing the spread and developing targeted vaccines or antiviral drugs.

FIZ Karlsruhe's contribution

The project thrives on interdisciplinary cooperation. FIZ Karlsruhe plays a key role in this. The institute uses its legal expertise to analyze the legal framework in the EU. Special emphasis is placed on data protection and intellectual property rights.



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Page 1 of 2







The aim is to legally secure the technology and promote its application and commercialization.

Page 2 of 2

With VirHoX, scientific findings and legal foundations are being laid to tackle the pressing challenges of our time. FIZ Karlsruhe is making a key contribution to the successful implementation of the project.

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