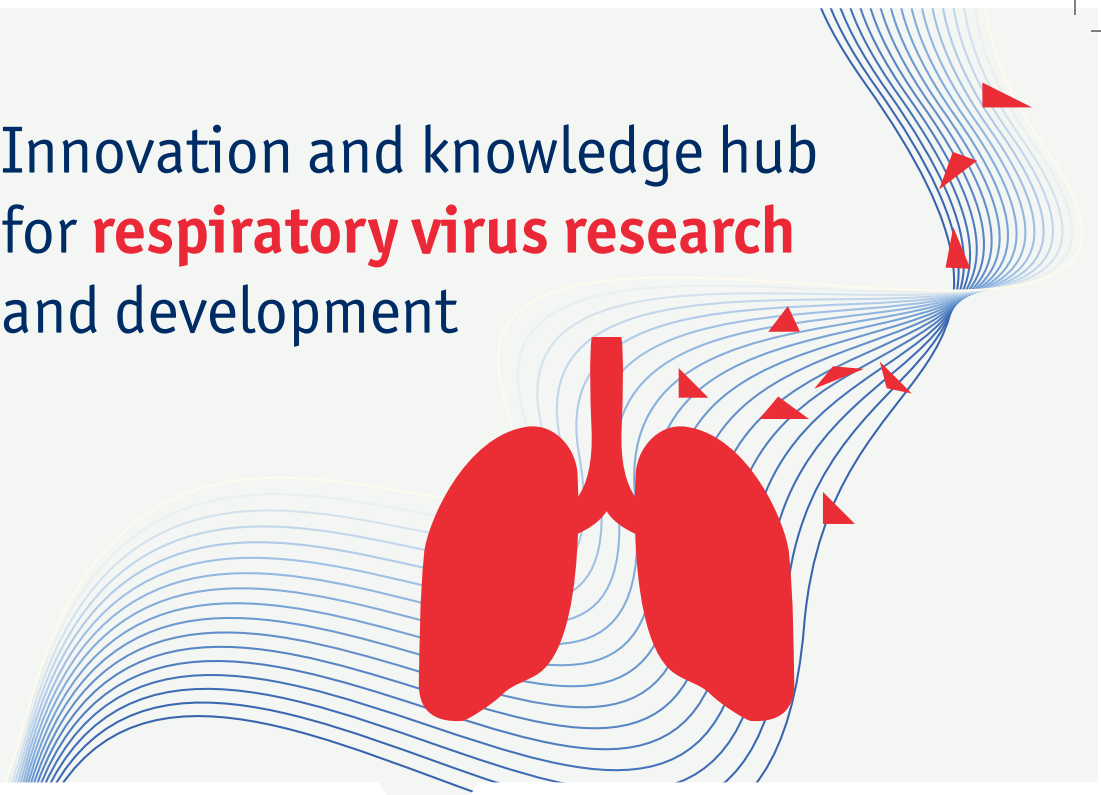
Innovation and knowledge hub for **respiratory virus research** and development



ReViRAnt (Respiratory Virus Repository Antwerp)

At UAntwerp ReViRAnt offers access to a repository of well-characterised, low-passage live viral isolates of respiratory viruses in combination with expertise in respiratory infections from a network of experts, both researchers and clinicians.

Situation before

Recurrent epidemics of respiratory viruses such as Influenza, RSV, and hMPV allow respiratory viruses to evolve and possibly generate new variants with altered characteristic. These changes can include immune escape from natural or vaccine-induced immunity, as well as increased infectivity or pathogenicity. While genomic surveillance of respiratory viruses is well-established, the availability of low-passage, well-validated clinical isolates remains limited. With the recent introduction of vaccines and monoclonal antibodies for viruses such as RSV, monitoring how changes in the viral genome translate to a specific phenotype that may affect vaccine efficacy is critical.

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ReViRAnt

Technology

ReViRAnt has established a repository of respiratory viruses, including over 120 RSV strains from 2017 until now, and other respiratory viruses such as Influenzavirus, seasonal Coronaviruses, hMPV, PIV since 2024.

Our repository characteristics are:

- Viruses at low-passage, minimising the occurrence of cell culture adaptations
- Virus isolation within 2-4 hours after collecting patient samples, guaranteeing a high success rate in virus isolation, even for sensitive respiratory viruses
- Viral collection with a large phenotypic heterogeneity
- Constantly updated bank, covering the currently circulating strains
- Genomic sequencing data and phenotypic virus characteristics available
- Easy access to virus isolates, with ethical clearance already in place
- Possibility to have access to limited patient information such as disease severity
- Original clinical samples are biobanked and can be made available upon request

For more information
contact
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or visit our website

About the researchers

The Laboratory of Microbiology, Parasitology and Hygiene (LMPH, Prof. dr. Peter Delputte) has an ongoing collaboration with the Antwerp University Hospital (Prof. dr. Stijn Verhulst) and the Department of Clinical Biology (Prof. dr. Veerle Matheeussen). This collaboration ensures immediate access to patient samples, primary respiratory virus isolates, fully equipped microbiology and molecular biology labs as well as facilities for antiviral screening, analysis of immune responses and evaluation of vaccine effectiveness.

Partners we search for

Industrial and academic partners or CROs seeking viral strains for R&D and serology testing, vaccine development, controlled human infection models (CHIM) studies and development of animal models for respiratory infections. Collaboration is possible via MTAs, license agreements, collaborative projects or tailor-made agreements.

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