

IHI Call Days | Call 12

Unraveling the Viral Contribution to Human Health

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Link to the IHI brokerage platform:

- <http://bit.ly/47oAl6h>

Challenges and objectives

Problem

Our public health warning systems are blind to unexpected and unknown pathogens. Current systems detect and communicate outbreaks too late, leaving us vulnerable to pandemics.

IHI Objectives

SO1: contribute towards a better understanding of the determinants of health and priority disease areas

SO4: exploit the full potential of digitalisation and data exchange in health care

Unmet need

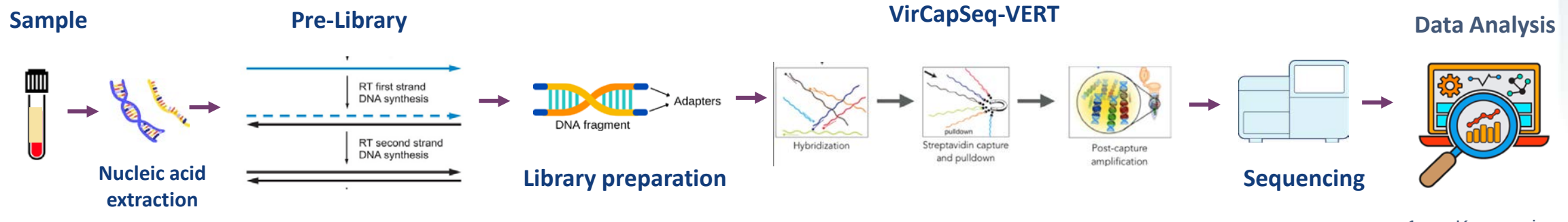
We are addressing the critical need for a surveillance system that is not only reliable but also accessible—delivering clear, interpretable data in real-time to enable a rapid response to public health threats

VIRUS - Viral Influence Research on Unseen Symbiosis

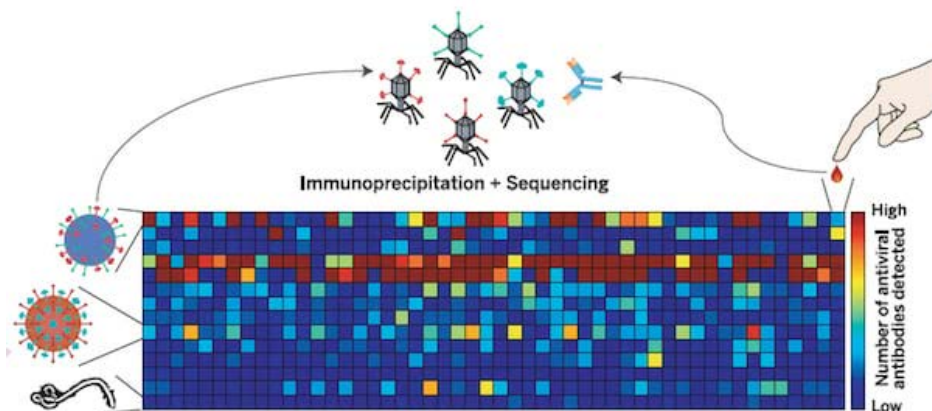
The Solution

The system

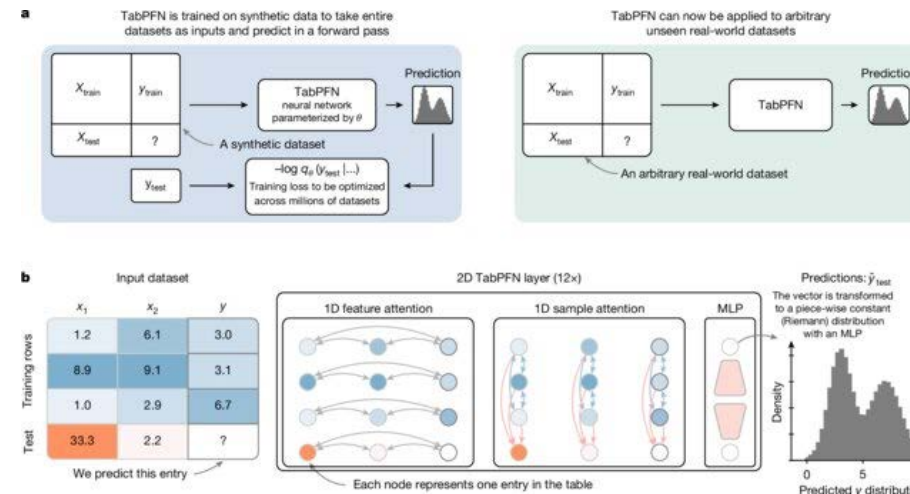
Present and active infections (Viromics and Transcriptomics)



Previous infections

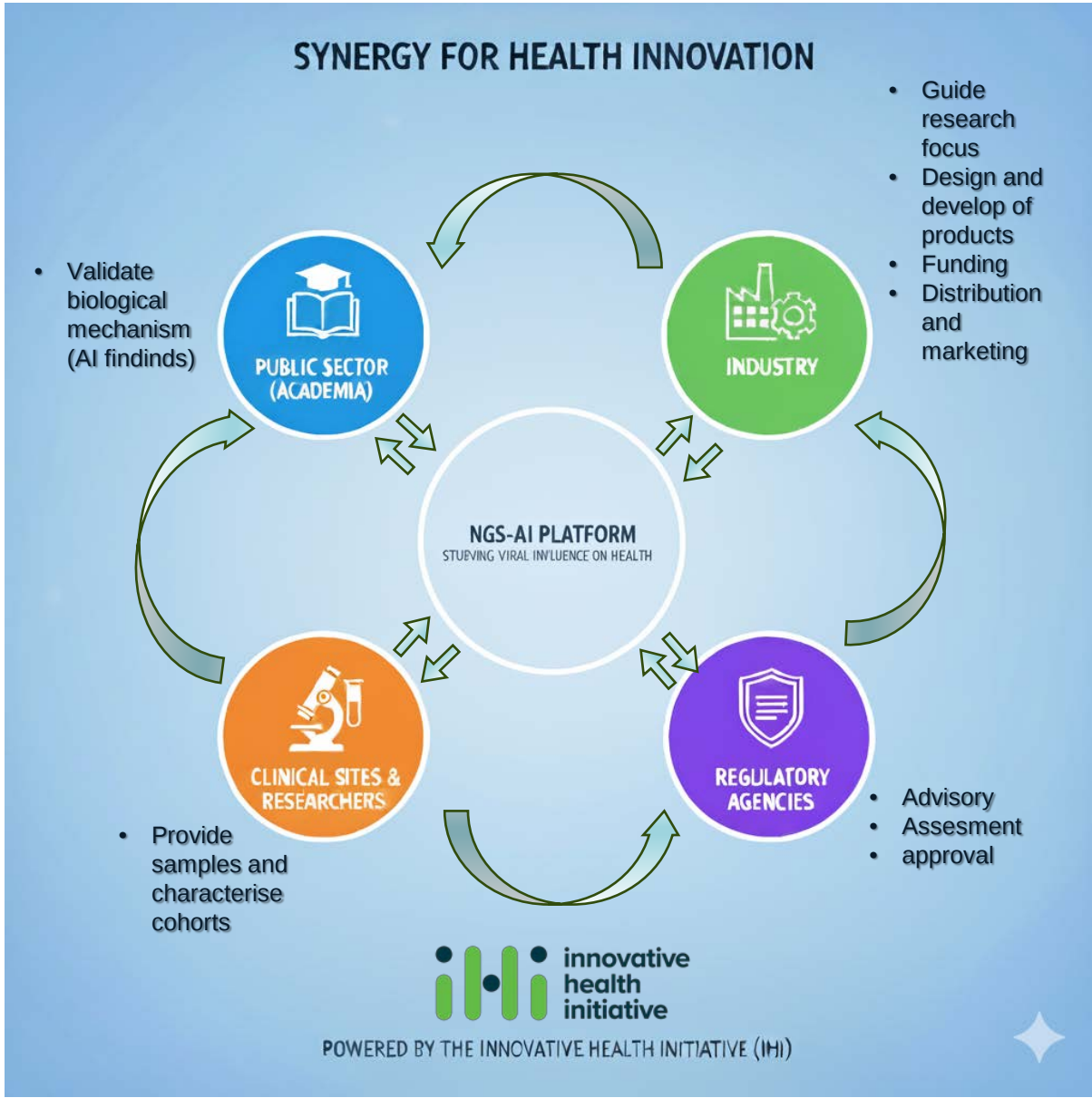


Patterns analysis



1. Known virus detection
2. Novel virus identification

Is your project suitable for IHI?



Outcomes and Impact

A **discovery platform** that uses NGS and AI to map viral-host interactions, delivering a pipeline of **novel biomarkers, therapeutic and prophylactic targets**.

Scientific impact: generate the foundational knowledge to move the human virome from a neglected area to a central pillar of understanding non-communicable diseases (like cancer, neurodegenerative, and metabolic diseases) and communicable diseases.

To ensure this research becomes a real-world solution

we integrate stakeholders into our consortium where **clinical sites** submit the cohort's characterization and samples, we unravel the mechanisms, **academia** validates those mechanisms, **industry** develops them into real drugs which will be proven from the clinical sites already integrated with the companion of **regulation authorities** from day one.

This directly **strengthens the EU's competitiveness** by creating a sovereign, market-leading solution in critical health tech, driving exports and establishing the Union as the global leader in genomic surveillance.

For **patients**, this means faster access to innovative solutions for diagnostic (biomarkers), prevention (prophylactic products) and treatment (therapy).

Expertise and resources

