

The European Plotkin Institute for
Vaccinology: a Belgian initiative for
pandemic readiness

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Université libre de Bruxelles

History of the Project



September 2018, the Strategic Committee set up by Prime Minister Charles Michel launched the National Pact for Strategic Investments. Set up of European anti-infections unit.



March 2020, Prime Minister Sophie Wilmès announced the intent of the federal government to intensify its efforts in the fight against COVID-19.

Create a Belgian unit for the fight against infectious diseases that is unique in Europe through an investment of 40 million EUR.

Publicatie overeenkomstig artikelen 472 tot 478 van de programmwet van 24 december 2002, gewijzigd door de artikelen 4 tot en met 8 van de wet houdende diverse bepalingen van 20 juli 2005 en artikelen 117 en 118 van de wet van 5 mei 2019.

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190e ANNEE

DONDERDAG 13 AUGUSTUS 2020

JEUDI 13 AOUT 2020

31 JULI 2020. — Koninklijk besluit houdende het invoeren van een subsidie voor de infectiebestrijdingseenheid

FILIP, Koning der Belgen,
Aan allen die nu zijn en hierna wezen zullen, Onze Groet.

Hebben Wij besloten en besluiten Wij :

Artikel 1. § 1. Er wordt een infectiebestrijdingseenheid opgericht in samenwerking met de Universiteit Antwerpen (UA) en de Université libre de Bruxelles (ULB) met als doel bij te dragen tot de ontwikkeling van vaccins of immunotherapieën om de infectieuze menselijk ziektes te beheersen, inzonderheid door het uitvoeren van klinische studies en immunologisch onderzoek.

De infectiebestrijdingseenheid wordt opgedeeld in twee complementaire delen gelegen te Antwerpen en Brussel.

31 JUILLET 2020. — Arrêté royal portant création d'un subsidie pour l'unité de lutte contre les infections

PHILIPPE, Roi des Belges,
A tous, présents et à venir, Salut.

Nous avons arrêté et arrêtons :

Article 1^{er}. § 1^{er}. Une unité de lutte contre les infections est créée en collaboration avec l'Université Antwerpen (UA) et l'Université libre de Bruxelles (ULB) avec pour but de contribuer au développement de vaccins ou d'immunothérapies pour maîtriser les maladies infectieuses humaines, notamment par la réalisation d'études cliniques et d'une recherche immunologique.

L'unité de lutte contre les infections est subdivisée en deux parties complémentaires situées à Anvers et à Bruxelles.



The European Plotkin Institute for Vaccinology

A joint initiative of UAntwerp and ULB for biopreparedness





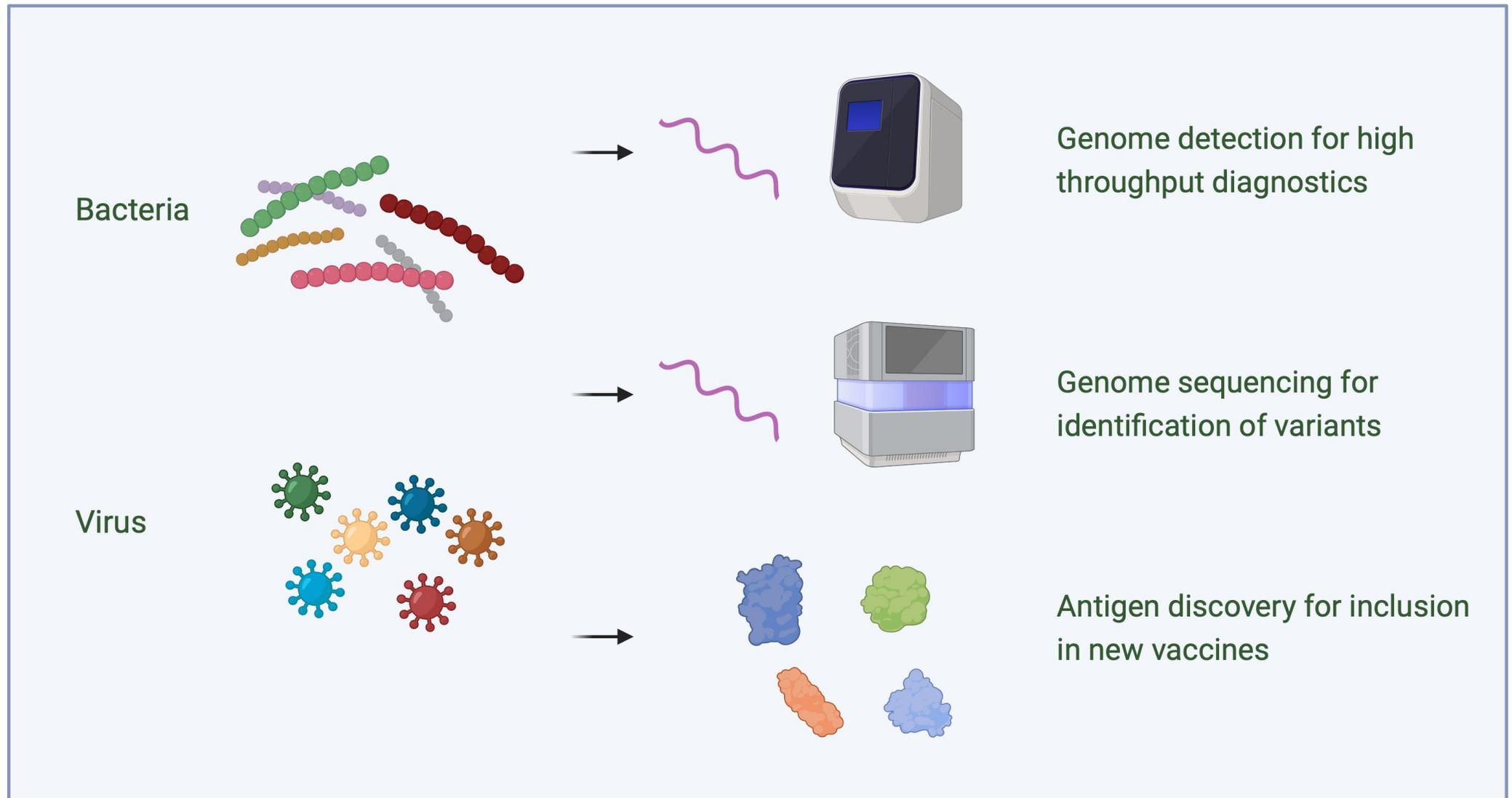
- › @UAntwerp
- › Unique clinical facility of 6000 m²
- › Quarantine unit with 30 beds
- › Out-patient vaccine trial unit
- › High level safety laboratories

- › @ULB
- › Unique facility of 3600 m²
- › Immunology and microbiology
- › Out-patient vaccine trial unit
- › High level safety laboratories



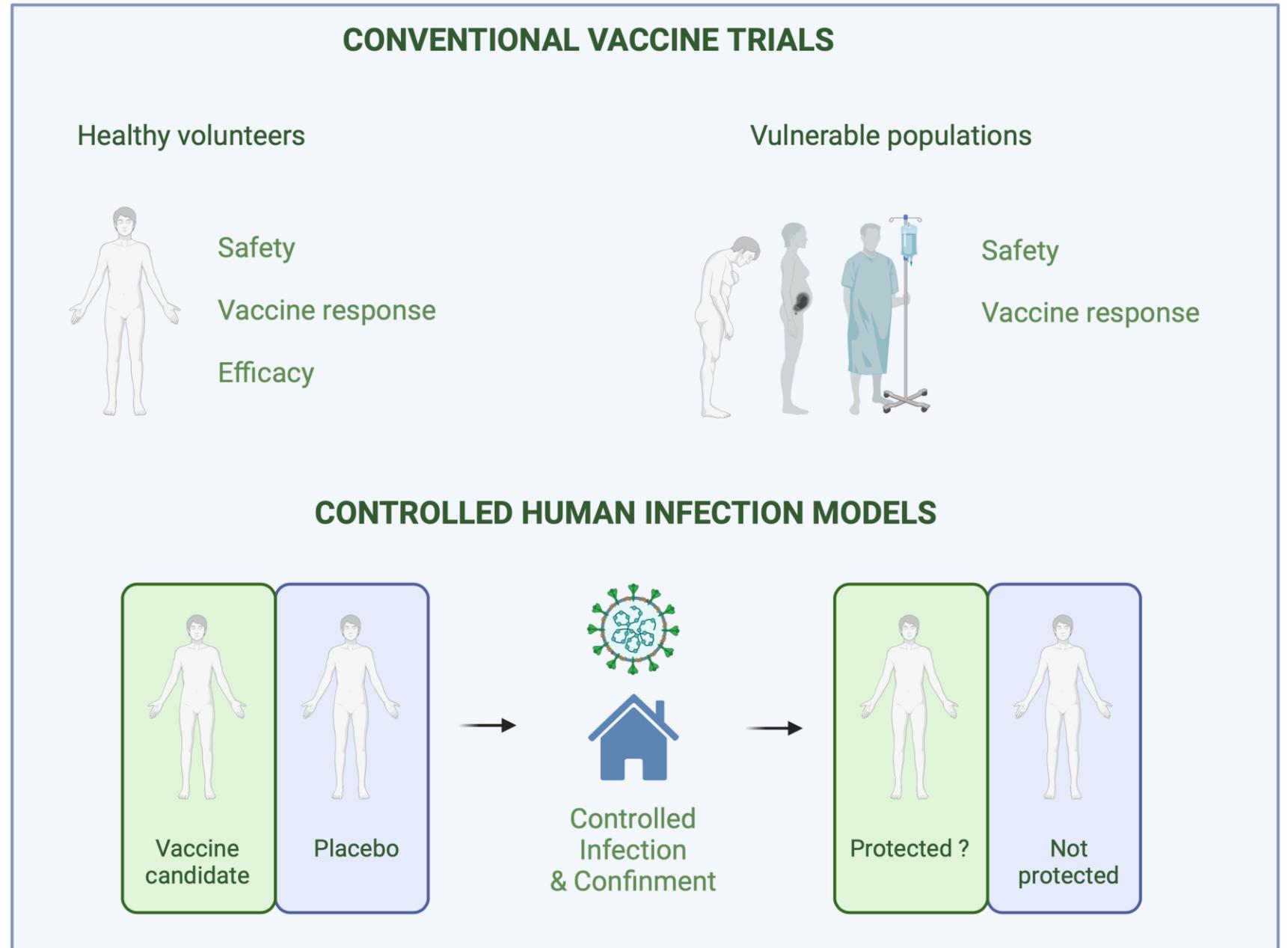


MICROBIOLOGY



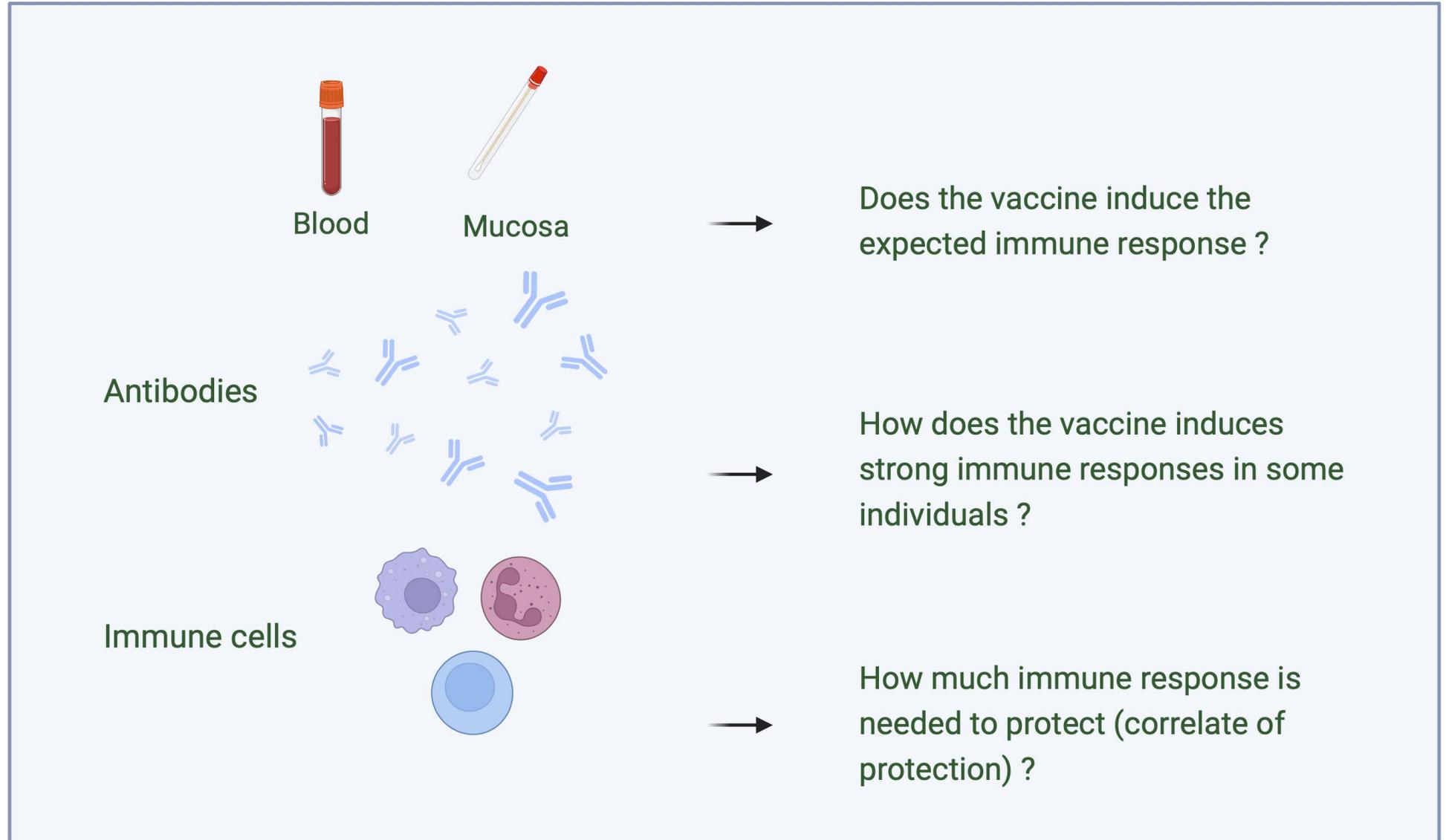


VACCINE TRIALS

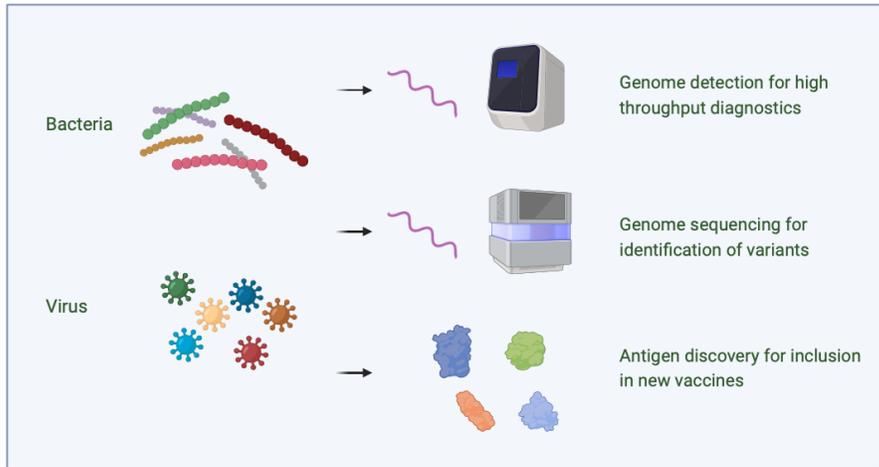




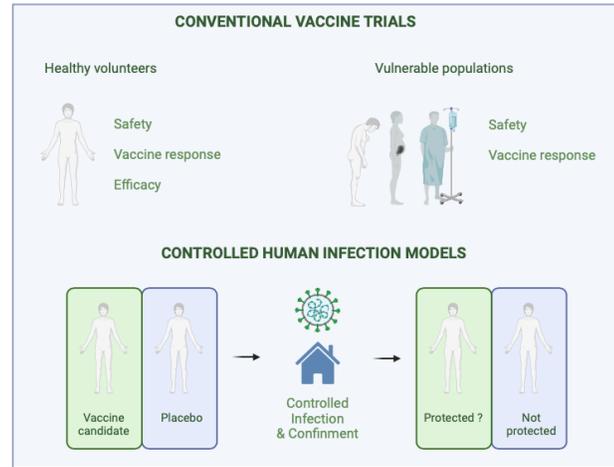
IMMUNOLOGY



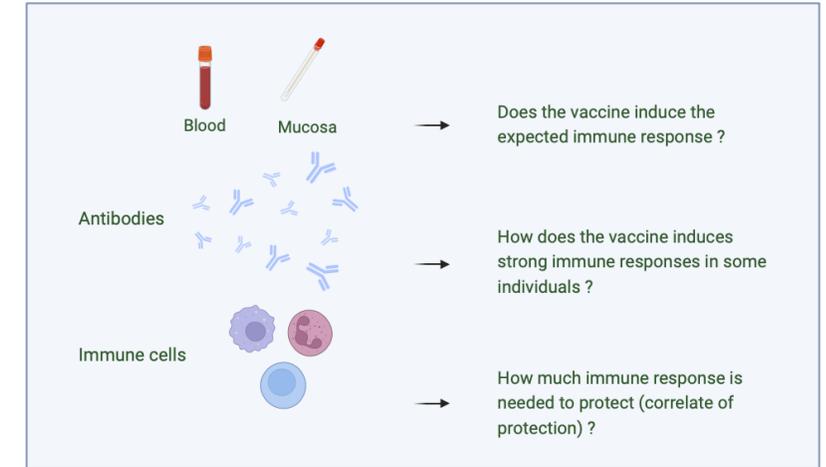
Microbiology



Vaccine trials



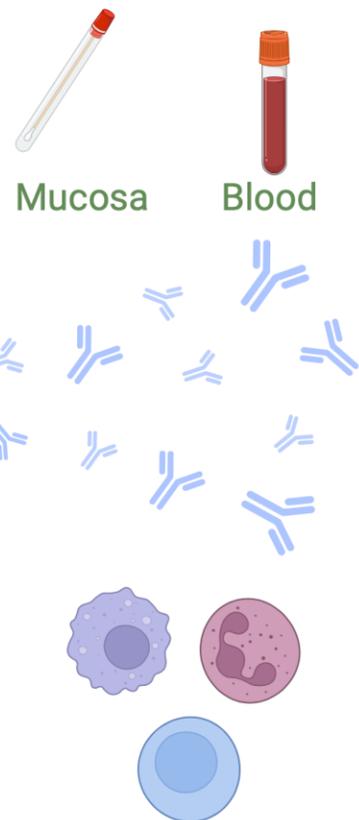
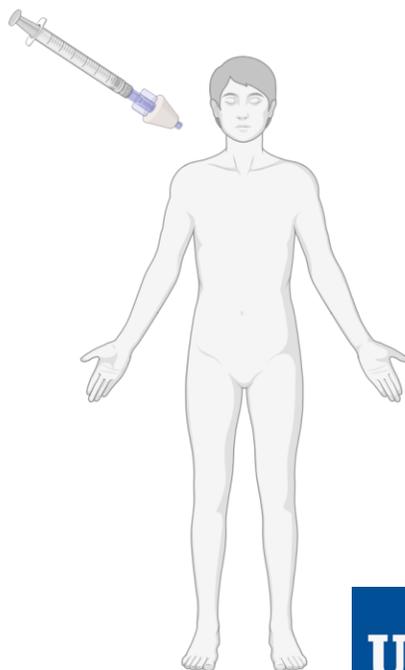
Immunology



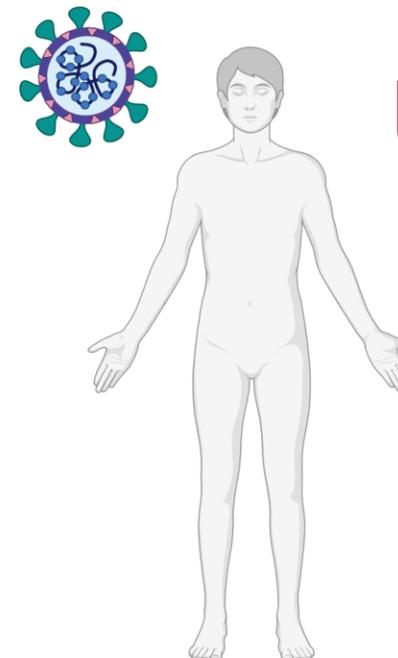
The European Plotkin Institute for Vaccinology, an integrated capacity for the development of vaccines against epidemic and endemic pathogens

MUSICC: Setting-up a clinical trial platform to assess mucosal vaccines against coronaviruses

Mucosal vaccination



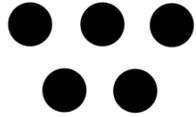
Controlled infection



- Assess vaccine response
- Identify correlates of protection

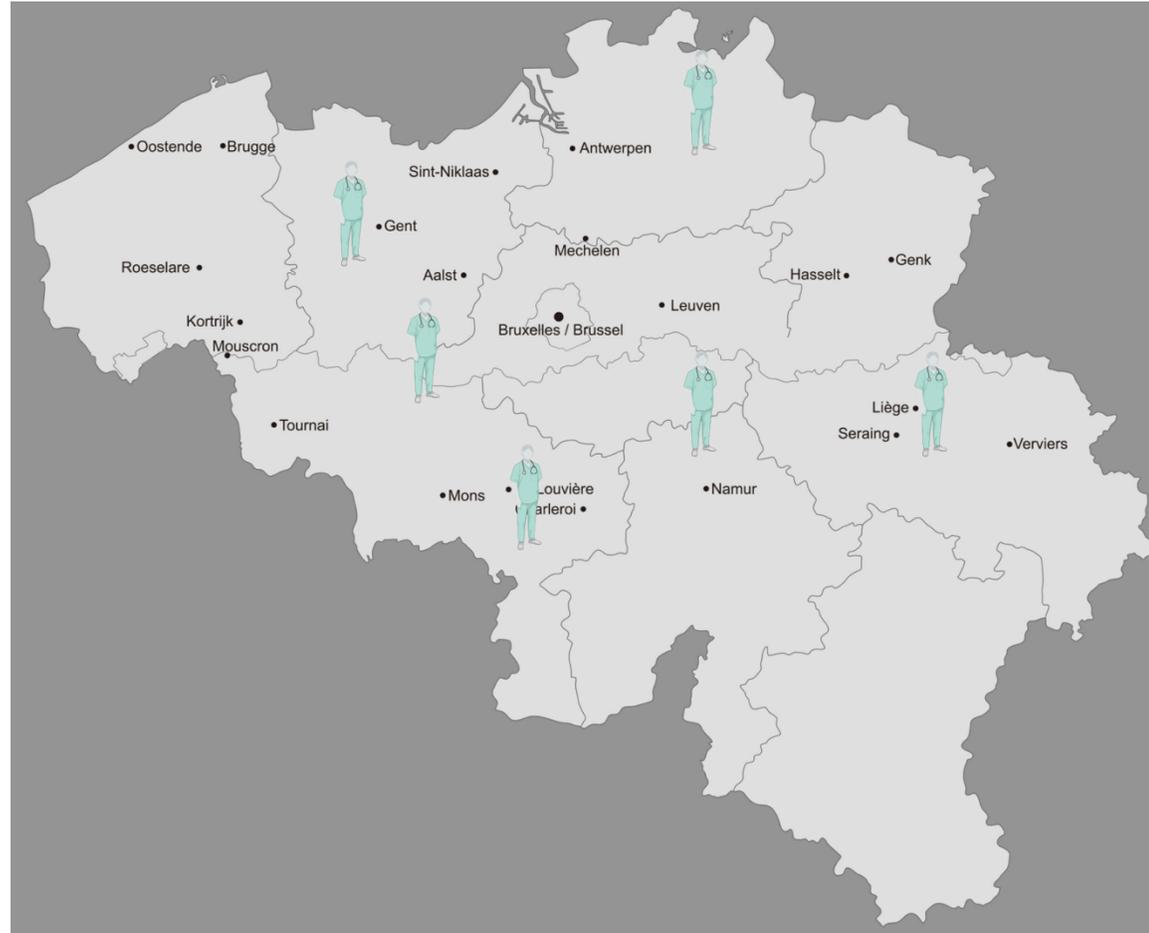


European
Plotkin
Institute



Wallonia.be
EXPORT
INVESTMENT

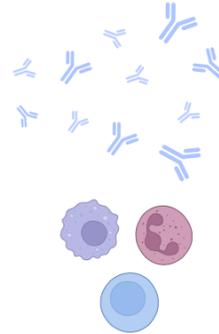
BIOWIN



Towards a vaccine trial network in Wallonia, and Belgium



1. Vaccine trial network



2. Vaccine immunology network

Standardizing vaccine trials and vaccine immunology
for pandemic readiness in Europe

European Vaccine Hub for Pandemic Readiness



**Kick-off meeting, Siena
June 22-23, 2025**

- 1) A Hub with permanent structure and sustainable beyond the four years funding of the present HERA call. Agile management structure able to make quick decisions to respond to emerging threats and pandemics.**
- 2) A Hub able to reach all European partners that can contribute with a *technology, physical facilities, containment labs BSL-4, serology and immunology capacities, epidemiology networks, clinical trial infrastructures, industrial manufacturing facilities and technologies.***

EVH Consortium composition



Beneficiaries



Fondazione
Biotechnopolo
di Siena



Affiliated entities

Fondazione Biotechnopolo di Siena:

- Istituto Zoprofillatico Sperimentale delle Venezie (IT)

Institut Pasteur:

- IDMIT - CEA (FR)
- Inserm (FR)

Deutsches Zentrum für Infektionsforschung:

- Philipps Universität Marburg (DE)
- Helmholtz Zentrum München (DE)
- Helmholtz Centre for Infection Research (DE)
- Ludwig-maximilians-Universität München (DE)
- Stiftung Teirarztliche Hochschule Hannover (DE)
- Technische Universität München (DE)
- Universitätsklinikum Köln Aor (DE)
- Universitätsklinikum Hamburg Eppendorf (DE)
- Eberhard Karls Universität Tübingen (DE)

Associated partners

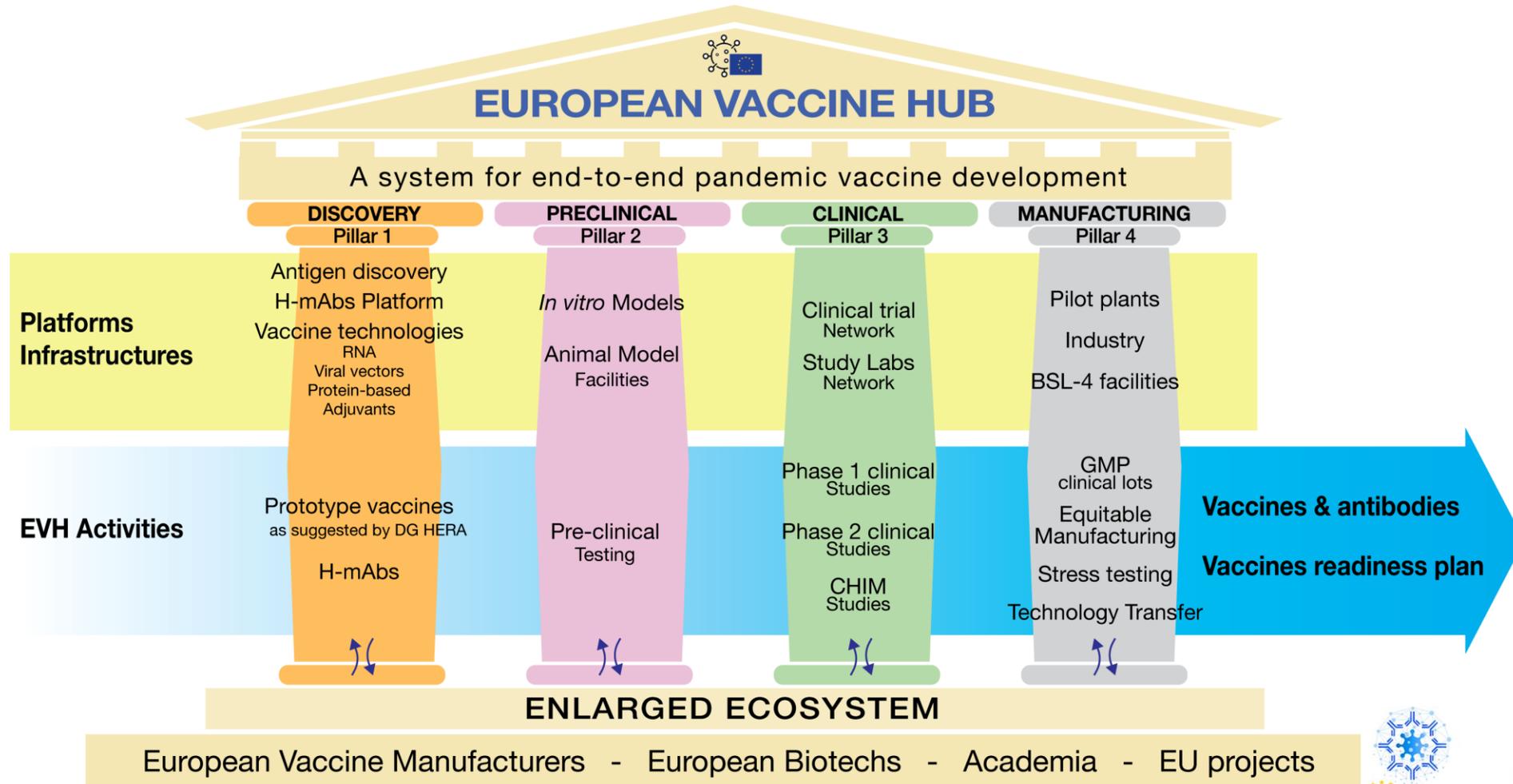
Pasteur Network (FR) (IP Associated partner)



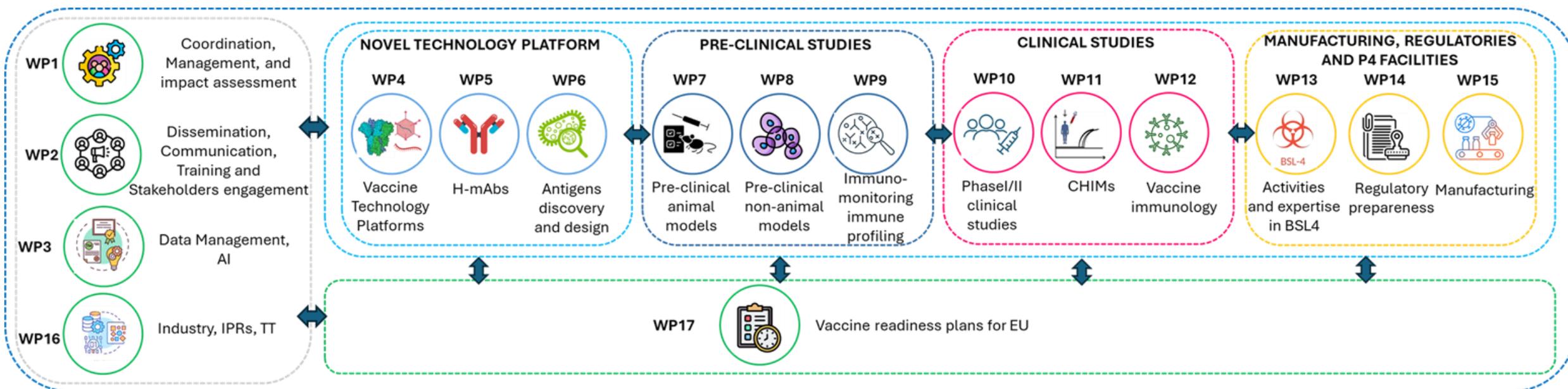
European Vaccine Hub



Provide EU with a self sustainable and independent ability to discover, develop and manufacture vaccines and monoclonal antibodies against infectious diseases of epidemic and pandemic potential



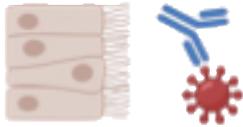
EVH is structured in 17 interlinked Work Packages (WPs)



Vaccine Immunology – Scope of immunogenicity

Level of confidence as potential CoP

Core Assays

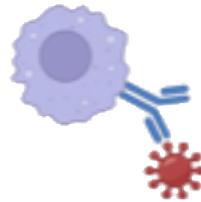


Antibodies

Candidate Assays

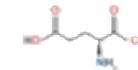
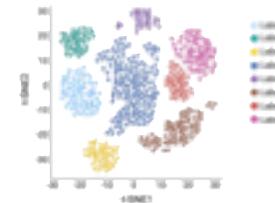


T cells



Antibodies

Exploratory Assays



High dimensional



1. Identify, set up, qualify & run **core immunoassays**
2. Identify, set-up and run **candidate & exploratory immunoassays**
3. Establish a **vaccine immunology laboratory network** in Europe
4. Set-up procurement of **key reagents and clinical sample standards**
5. Scale-up production and procurement of **standardised immunoassays** across Europe



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THANK YOU

ULB