



PASTEUR NETWORK

A scientific and humanistic community united in its values
and missions to serve public health worldwide



33
MEMBER
INSTITUTES



25
COUNTRIES



23000
PASTEURIANS



AMERICAS

Oswaldo Cruz Foundation (Fiocruz) (Rio de Janeiro)
INRS Armand-Frappier Santé Biotechnologie Research Centre (Laval)
Institut Pasteur de la Guadeloupe (Pointe-à-Pitre)
Institut Pasteur de la Guyane (Cayenne)
Scientific Platform Pasteur-USP (São Paulo)
Institut Pasteur de Montevideo

AFRICA

Pasteur Center in Cameroon (Yaoundé)
Cermes Niger (Niamey)
Institut Pasteur de Bangui
Institut Pasteur de Côte d'Ivoire (Abidjan)
Institut Pasteur de Dakar
Institut Pasteur de Guinée (Conakry)
Institut Pasteur de Madagascar (Antananarivo)

EURO-MEDITERRANEAN

Institut Pasteur in Italy - Cenci Bolognetti Foundation (Rome)
Hellenic Pasteur Institute (Athen)
Institut Pasteur de Lille
Institut Pasteur (Paris)
Saint-Petersburg Pasteur Institute
Sciensano (Brussels)
Stephan Angeloff Institute of Microbiology (Sofia)
Institut Pasteur d'Algérie (Algiers)
Institut Pasteur du Maroc (Casablanca)
Institut Pasteur de Tunis

ASIA-PACIFIC

National Institute of Hygiene and Epidemiology (Hanoi)
Institut Pasteur du Cambodge (Phnom Penh)
Institut Pasteur Korea (Gyeonggi-do)
Institut Pasteur in Ho Chi Minh City
Institut Pasteur du Laos (Vientiane)
Institut Pasteur in Nha Trang
Institut Pasteur de Nouvelle-Calédonie (IPNC) (Noumea)
Institut Pasteur of Shanghai, Chinese Academy of Sciences
University of Hong Kong - Pasteur Research Pole
Institut Pasteur in Iran (Tehran)



WE ARE PASTEURIANS

From Louis Pasteur in the 19th century to Institut Pasteur Korea today,
our mission is to fight diseases for our loved ones





Institut
Pasteur
Korea

“Science knows no country,
because knowledge belongs to humanity,
and is the torch which illuminates the world.”

“Chance favors
only the prepared
mind.”

Louis Pasteur
(1822-1895)



CEO Message

Institut Pasteur Korea is a nonprofit research institute of Rep. of Korea established based on the scientific collaboration of Korea and France with a focus on infectious diseases. To contribute to global public health, multinational research teams strive to understand the mechanisms of diseases and develop new therapeutics utilizing state-of-the-art technology and research infrastructure.

The COVID-19 crisis has brought many challenges, but it has also provided chances for the Institut Pasteur Korea to leap forward towards a global center of excellence. The Institut successfully discovered COVID-19 therapeutics candidates by drug repositioning. The platforms developed through these efforts will facilitate research and development on future emerging infectious diseases.

The greatest advantage of the Institut Pasteur Korea is that it is part of a renowned Pasteur Network of health research institutes. Bridging the available resources deriving from this international network and Korea's excellent research infrastructure, the Institut Pasteur Korea aims to play a leading role in infectious disease research by developing itself into an Asia-Pacific regional hub of infectious disease research and a global partner.

The devoted members of Institut Pasteur Korea are putting the utmost effort into contributing to global public health through infectious diseases research.

Youngmee JEE, MD, PhD
CEO of Institut Pasteur Korea

We are Pasteurians

Institut Pasteur Korea is fulfilling its "Pasteurian" mission of contributing to global public health by generating excellent basic research outcomes and translating them into treatment, prevention, and diagnosis strategies.

HISTORY

2003.12

Agreement on Establishment of Institut Pasteur Korea between Institut Pasteur and Korea Institute of Science and Technology (KIST)

2004.04

Inauguration of the Institut Pasteur Korea (at KIST campus in Seoul, supported by the Ministry of Science and ICT)

2008.07

Establishment of Qurient Co., Ltd.

2008.05

The 1st Bio Safety Level 3 certified by Korean Government (Certification issued by KDCA)

2005.07

Agreement between Gyeonggi Province and Institut Pasteur Korea on the Relocation of Institut Pasteur Korea

2009.04

Relocation to and inauguration ceremony at Pangyo Techno Vally in Gyeonggi Province (Supported by Gyeonggi Province)

2014.05

Designation as a member campus of University of Science Technology (UST)

2016.02

Qurient went public on Korea Securities Dealers Automated Quotation (KOSDAQ)

2014.12

10th Anniversary Ceremony

Our Success Story

First-in-Class Tuberculosis Drug Discovery

Q203 has a novel mechanism and highly effective against both multi-drug-resistant and extensively drug - resistant mycobacterium tuberculosis. Q203 was licensed out to Qurient Co., Ltd. and has completed a Phase IIa clinical trial.

Establishment of Biotech Company

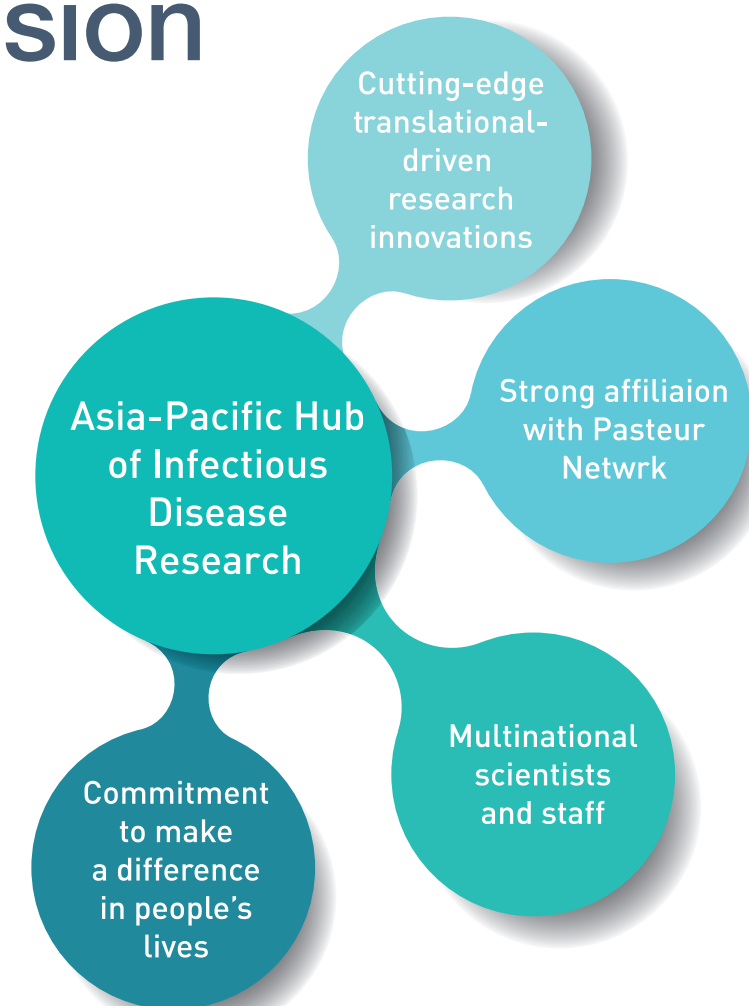
Qurient Co., Ltd. is a spin-off biotechnology company of Institut Pasteur Korea established to develop novel therapeutics from late discovery to human proof of concept.

Discovery of COVID-19 Drug Candidates

Through drug repositioning, Institut Pasteur Korea screened thousands of drugs, including the US FDA-approved drugs, for their antiviral efficacy against the SARS-CoV-2 in cell culture experiment and identified excellent candidates* for COVID-19 treatment. The drug candidates have proceeded to clinical trials initiated based on our domestic and international networks.
* Ciclesonide, nafamostat, camostat, niclesamide, etc.

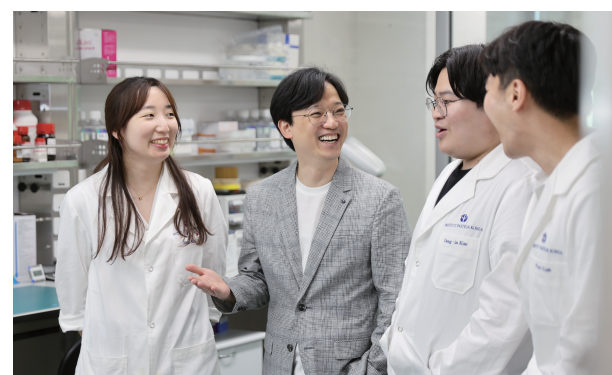


Vision



Mission

Institut Pasteur Korea is an infectious disease-focused research institute that utilizes proprietary platforms to identify novel molecular targets and discover small molecules to diagnose, treat, and address serious unmet global public health needs.



Core Values

Interpersonal Understanding

The ability to maintain positive relationships with individuals inside and outside the organization. To build important working relationships, this person actively networks with others, as well as seeks opportunities and behaves thoughtfully by considering the effects of his/her actions on others.

Communication

The ability to have clear and effective conversation with people inside and outside the organization. This person conveys his/her thoughts or ideas effectively to others.

Cooperation with Members

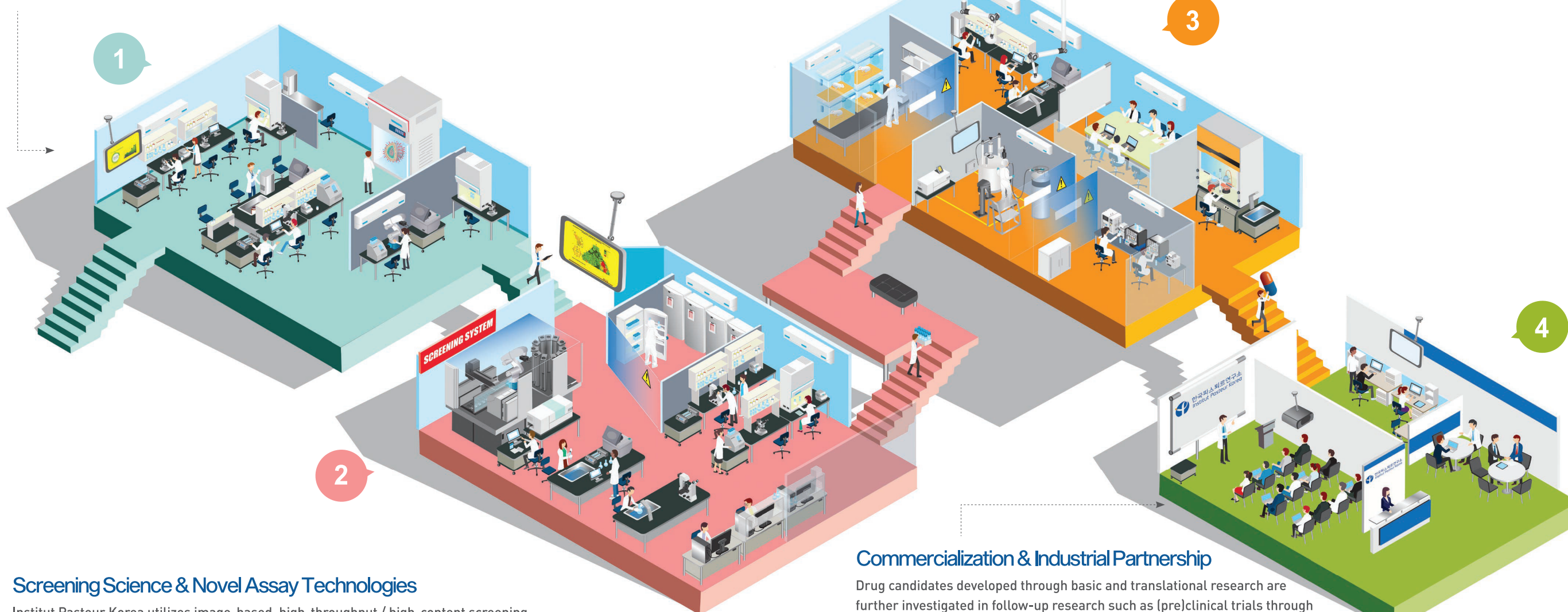
This person works effectively and cooperatively with others towards a common objective, and gives their best efforts to complete tasks with a sense of responsibility for the group.

Institut Pasteur Korea Drug Discovery Approach

Discovery Biology

Institut Pasteur Korea has been fighting infectious and neglected diseases.

- Zoonotic Virus Lab
- Applied Molecular Virology Lab
- Host-Parasite Research Lab
- Viral Immunology Lab
- Tuberculosis Lab
- Advanced Biomedical Research Lab
- Therapeutic Antibody Lab
- Antibacterial Resistance Lab



Screening Science & Novel Assay Technologies

Institut Pasteur Korea utilizes image-based, high-throughput / high-content screening (HTS/HCS) platforms optimized for infectious disease research. They are operated in BSL-2 and BSL-3 laboratories enabling the effective study of infectious diseases and the establishment of innovative strategies for treatment, prevention, and diagnosis.

- Technology Development Platform
- Screening Discovery Platform

Medicinal Chemistry & Animal Research

The hit/lead compounds identified by screening are further developed by experts in medicinal chemistry and animal research to ensure their ex vivo and in vivo efficacy and safety. Institut Pasteur Korea also operates a Biobank to collect and provide resources for infectious disease research.

- Lead Optimization
- Early Safety Profiling
- Testing in Animal Models
- Bioinformatics & Data Analysis
- Biobank

Commercialization & Industrial Partnership

Drug candidates developed through basic and translational research are further investigated in follow-up research such as (pre)clinical trials through technology transfer. Institut Pasteur Korea is making multifaceted efforts to translate excellent research outcomes into the application to ultimately benefit patients. For this means we work closely with industry, university, and institute partners at home and abroad.

- Invention Disclosure
- Patent
- Consulting
- R&D Collaboration
- Intellectual Property
- Licensing
- Knowledge and Practice
- Material Transfer Agreement

* Please visit our website to see more on our institute's inventions and technologies. (www.ip-korea.org)



Researchers in operation of the screening platforms located at the BSL-3 lab. (above) and the BSL-2 lab. (left)

R&D Infrastructure

Biosafety Level 3 (BSL-3) Laboratory

- First BSL-3 facility to achieve national certification in Korea
- Designed to handle risk group 3 pathogens such as coronaviruses (SARS-CoV, SARS-CoV-2, MERS-CoV), Mycobacterium tuberculosis, high-risk influenza, and SFTS virus

Biosafety Level 2 (BSL-2) Laboratory

- Registered in Korea Ministry of Science and ICT according to the Living Modified Organisms Law of Korea
- Designed to handle risk group 2 pathogens including low-risk influenza, hepatitis, Zika virus, Leishmania, and hospital-acquired infections

Screening Platforms

- Employs robotic-based high-throughput / high-content screening platforms to test chemical libraries and RNAi collections
- Fully-automated screening platforms operated within BSL-2 and BSL-3 laboratories optimized for most biological and infectious pathogen research
- Discover novel drug candidates, biomarkers, probes, and more

Chemical Screening

Chemical screening can be used to identify molecules with biological activity from our libraries covering 500,000 compounds, including synthetics and natural products. The diverse collection was assembled with the help of internal medicinal chemistry experts and collaboration with established strategic partners.

RNAi Screening

RNAi technology enables sequence specific knockdown of genes to identify new targets and cell signaling pathways for disease understanding. Our RNAi collections covers both siRNA and shRNA technologies for gene by gene systematic interrogation of our biological models.

Automation Management Solutions

Multimodality instrumentation and automated microscopes are integrated into our robotic platforms for fast reliable data acquisition. Our detection technologies include fluorescence, bioluminescence, absorbance, and high-content imaging to enable understanding of simple to complex biological interactions.

Animal Laboratory

- Contains Specific Pathogen Free (SPF) laboratory, Animal Biosafety Level 2 & 3 (ABSL-2 & ABSL-3) laboratories
- Carries out in vivo efficacy/toxicity analyses of novel compounds, infection mechanism studies, and maintenance of laboratory animal resources such as transgenic mice

Virus Research Resource Center (Plan to open in 2023)

Institut Pasteur Korea is building a Virus Research Resource Center, which will be equipped with new BSL-3 & ABSL-3 facilities and a Biobank, with the support of the Korean Ministry of Science and ICT. This center will play a pivotal role in responding to (re)emerging infectious diseases as a core infrastructure for basic virus research in the metropolitan area. It will be open for the use of scientists and researchers in the industry, institutes, and academia.



Education & Training

Various Training
and Education
Programs

UST-IPK Campus
Master's
& Doctoral Programs

Fostering Young Generations

Internship

Education and teaching is one of the three core missions assigned by Dr. Louis Pasteur, together with excelling in research and promoting public health. Leveraging the strength in infectious-disease focused research and discovery, Institut Pasteur Korea utilizes its multinational and infrastructural resources to share the benefits with young generations of scientists.

We provide educational opportunities for students and promising young scientists and researchers to help further their interest in science and improve their capabilities as researchers and scientists.

Institut Pasteur Korea in 2021 Key Figures



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Domestic and International Research Collaboration

Joint research, research services (screening technology support), memorandum of understanding, etc.
* COVID-19 related research collaboration: 70 cases



050

Publications

Cell, Journal of Experimental & Clinical Cancer Research, PNAS, etc.



016

Patents

Domestic and international patents, 5 registered & 11 filed



001

Commercializations

Technology transfer of a novel antibacterial drug candidate against multidrug-resistant gram-positive bacteria

COVID-19 Response

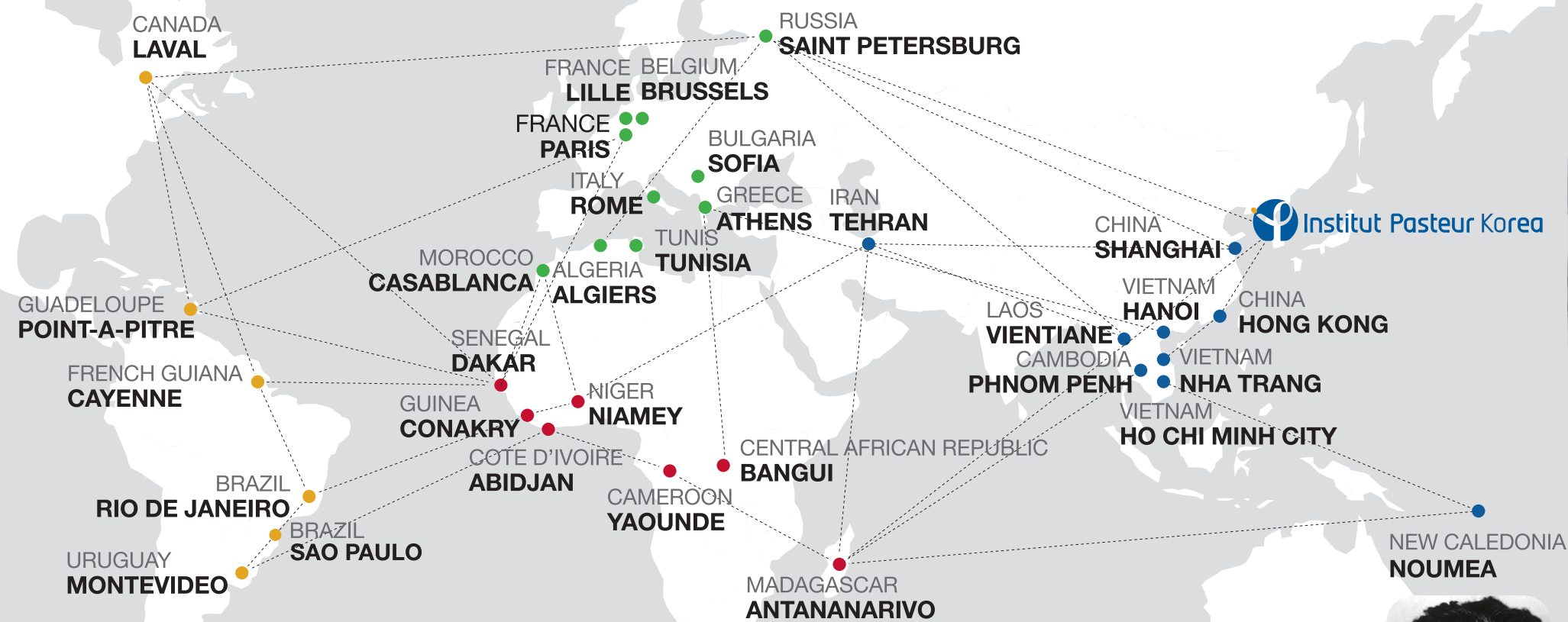


- Discovery of four COVID-19 drug candidates and conducting global clinical trials (2020~)
- Analysis of the immune profiles of individuals vaccinated with different types of COVID-19 vaccines (cooperation with major hospitals in Korea)
- Contributing to the government's domestic R&D support to respond to COVID-19 (Korea's pan-governmental COVID-19 treatment and vaccine R&D supporting group, COVID-19 response R&D support council, etc.)
- Supporting COVID-19 therapeutics and vaccine development of industry, universities, and research institutes by screening the efficacy of their therapeutic candidates and antibodies
- Participation in major global committees (WHO COVID-19 Emergency Committee, CEPI Safety Platform for Emergency vACCines Data and Safety Monitoring Board, etc.)

P A S T E U R I A N S

PASTEUR NETWORK

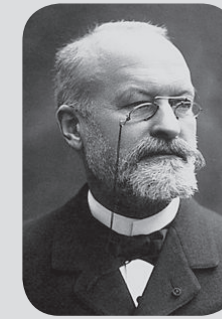
33 MEMBERS **25** COUNTRIES **23,000** PASTEURIANS **10** NOBEL LAUREATES



- Euro-Mediterranean
- Asia-Pacific
- Africa
- Americas

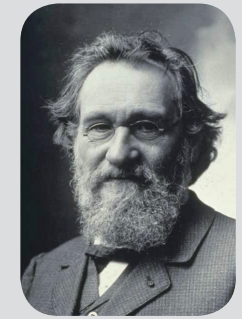


Nobel laureates



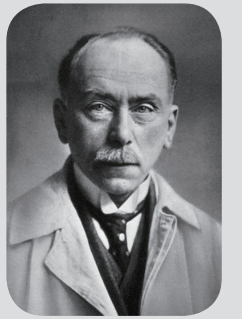
Dr. Alphonse Laveran

Nobel Prize for Physiology or Medicine in 1907
In recognition of his work on the role played by protozoa in causing diseases



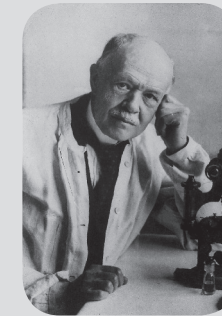
Dr. Ilya Mechnikov

Nobel Prize for Physiology or Medicine in 1908
In recognition of their work on immunity



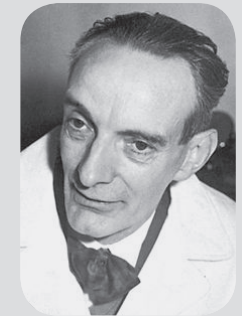
Dr. Jules Bordet

Nobel Prize for Physiology or Medicine in 1919
For his discoveries relating to immunity



Dr. Charles Nicolle

Nobel Prize for Physiology or Medicine in 1928
For his work on typhus



Dr. Daniel Bovet

Nobel Prize for Physiology or Medicine in 1957
For his discoveries relating to synthetic compounds that inhibit the action of certain body substances, and especially their action on the vascular system and the skeletal muscles



Dr. André Lwoff

Nobel Prize for Physiology or Medicine in 1965
For their discoveries concerning genetic control of enzyme and virus synthesis



Dr. Jacques Monod

Nobel Prize for Physiology or Medicine in 1965
For their discoveries concerning genetic control of enzyme and virus synthesis



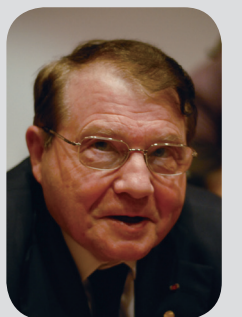
Dr. François Jacob

Nobel Prize for Physiology or Medicine in 1965
For their discoveries concerning genetic control of enzyme and virus synthesis



Dr. Françoise Barré-Sinoussi

Nobel Prize for Physiology or Medicine in 2008
For their discovery of human immunodeficiency virus



Dr. Luc Montagnier

Nobel Prize for Physiology or Medicine in 2008
For their discovery of human immunodeficiency virus