Collaborative Research in the Institut Pasteur International Network

Institut Pasteur Center for Global Health

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The Institut Pasteur is a private, non-profit foundation focused on basic sciences for the benefit of public health since 1887.

Mission: to help prevent and treat diseases, mainly those of infectious origin, through research, teaching, and public health initiatives.

**Louis Pasteur vision**: to improve human health and welfare through scientific discovery

*Science has no native land, as knowledge is the heritage of humankind, the torch that lights up the world*

Louis Pasteur
Institut Pasteur Center for Global Health

- Promote research using state-of-the-art technology to address the most significant public health challenges worldwide

- Educate and equip the next generation of global health scientists and practitioners

- Support local authorities in the management and response to infectious disease outbreaks and better understand emergence and transmission patterns in order to limit further spread in human populations
Institut Pasteur International Network (IPIN)

33 Pasteur institutes, 9500 researchers in 26 countries across 5 continents

- Strong bonds within the local health and education systems
- Active national and international scientific collaborations
- Cross sectoral partnerships to tackle global health challenges
Institut Pasteur Paris

- 130 Research Units
- 10 Nobel laureates (HIV)
- More than 60 nationalities
- 500 Master, PhD & Postdocs per year
- 55,000 m² in the heart of Paris

- 11 Scientific Departments
- 2500 employees

- 14 National Reference centers & 8 WHO collaborating centers

- Industrial partnerships

- Microbiology
- Infectious diseases
- Immunology
- Neurosciences
- Stem cells
- Cancer
Research areas linked to public health priorities

- Most important causes of lethality in children: encephalitis, respiratory infections, diarrhea
- Pandemic diseases: HIV, Malaria, Tuberculosis, Influenza, Polio
- Emerging and new pathogens (vector-borne infections, coronavirus,…)
- Drug resistance (Antibiotics, Malaria, HIV, Tuberculosis, Leshmaniasis,…)
- Neglected diseases: Buruli ulcer, Rabies, Dengue
- NCDs
- Point of Care and access to diagnosis
Double-Pronged Collaborative Research Strategy

Partnerships
- Research foundations
- Research centers
- Public authorities
- International Organizations
- Companies/industries
- Philanthropy
- Donors

Developing international consortia on public health issues or specific topics

Collaboration at interdisciplinary levels in strongly emerging fields

Maturing projects with strong applicative potential

Strengthening collaborations within IPIN

Initiate New Subjects

ACIP/PTR

"Transversal Programs"

ValoExpress/PasteurInnov

GPF

"Major Federating Programs"

AIC

"Targeted Incentive Actions"

Internal calls for proposals
Global Health Security
IHR
Outbreak

Research projects and Consortia

One Health Projects

Transversal Projects and Actions

Surveillance, Preparedness & Response

PRNDs, AMR, Malnutrition, Microbiome

Emerging Viruses, Zoonoses

Technology & incubation platforms

Regional laboratory workshops
- Post Ebola in West Africa
- Zika

TB consortium
- Malaria consortium
- Venoms and Toxins

Antibiotic resistance
- Environmental impact
- Emerging, re-emerging pathogens

Biobanking
- Bioinformatics
- Technology transfer and IP
Training and education at IPIN

500 people each year participate to the 27 courses organized by the teaching centre.

60 nationalities.

220 PhD students perform their research works in the Institut Pasteur.

The Pasteur-Cram School of public health.

An international PhD program.

Lab & field hands-on training.

15 to 25 Regional courses each year.
Anchored on the 10 African Institut Pasteur

- Historic links with local universities and health systems
- Scientific expertise
- Training and supervision experience and facilities
- National and international partnerships
Objectives:

- Strengthen African universities by providing training through research programs based on local needs,
- Provide intra-African mobility grants from MSc to postdoc levels,
- Provide management and leadership skills in partnership with ongoing initiatives,
- Increase the access of women to leadership positions in research and public health,
- Bridge the linguistic barriers to productive academic and research collaborations throughout Africa,
- Improve the employability of young researchers by providing sustainable career tracks in partnership with local and regional stakeholders including the private sector.
Human genomics and genetics
Tunisia

Bioinformatics
Senegal

Malariology
Ivory Coast

Medical microbiology
Cameroon

Outbreak preparedness & response
Guinea

Regional MSc
PhD track
African host lab networks
Post-doc exchanges
Placement in the private sector
Summer schools
Research career fair

IP project coordinator
Project members
Potential project member (in progress)
Potential transversal partners
Thank you!
# A global Interface across the Institut Pasteur network

<table>
<thead>
<tr>
<th>Transversal Centers</th>
<th>11 scientific departments in Paris</th>
<th>33 Institut Pasteur International Network</th>
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<tbody>
<tr>
<td>Cell biology &amp; Infection</td>
<td>Developmental &amp; Stem Cell Biology</td>
<td>Institut Pasteur in Cambodia</td>
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<tr>
<td>Structural Biology &amp; Chemistry</td>
<td>Genomes &amp; Genetics</td>
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<tr>
<td>Immunology</td>
<td>Infection &amp; Epidemiology</td>
<td>Institut Pasteur du Maroc</td>
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<td>Microbiology</td>
<td>Neuroscience</td>
<td>Centre Pasteur du Cameroun</td>
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<td>Parasitology</td>
<td>Virology</td>
<td>Etc.</td>
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<tr>
<td>Mycology</td>
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Multidisciplinary collaborations