

# Inserm

La science pour la santé \_\_\_\_\_\_
From science to health



# **Inserm presentation**



# Inserm

La science pour la santé \_\_\_\_\_ From science to health



Inserm is the only public research organization in France entirely dedicated to health.



# Inserm

La science pour la santé \_\_\_\_\_ From science to health



Our objective: to promote the health of all by advancing knowledge on living organisms and their diseases, and by developing innovation.

# Content

Address major biomedical research challenges

Take action to improve the health of all

Disseminate knowledge for the benefit of all



# Inserm

La science pour la santé \_\_\_\_\_ From science to health



Address major biomedical research challenges

### Be a reference in biomedical research



### In Europe and worldwide

- 7,000 international cooperation agreements with 106 countries
- 2 thematic coordination programs, 12 new first-step projects and 12 new European and international research projects or networks
- · 2 joint research units abroad

### In France

- 269 research units
- 34 clinical investigation centers
- 48 service units



\* As of April 7, 2023

### 14,180 staff

- 5,025 civil servants (2,166 researchers, ATIP-Avenir contracts included)
- 3,423 contract staff and temporary workers (incl. ATIP-Avenir contracts)
- > 50 ATIP-Avenir contracts
- 5,732\* teacher-researchers and hospital teachers

# A budget of **€1,060 million**

€681 million from government subsidies and €379 million from internal resources



#### **Patents and licenses**

- A portfolio of 2,340 patent families
- 126 new license agreements signed
- 307 R&D partnerships

## Be a reference in biomedical research (2)



### In Europe

- No. 1 academic applicant in the biomedical sector in Europe
- No. 2 European applicant in the biotechnology sector
- No. 2 European applicant in the pharmaceutical sector

#### Horizon Europe launch and 2021 results:

- ERC: 17 individual grants, 2 participations in Synergy Grants
- Marie Skłodowska Curie Actions: 5 individual grants, 3 doctoral networks, including 1 coordination
- Health Cluster: 11 projects funded, including 3 coordinations
- EIC: 5 projects, including 1 coordination

#### Horizon 2020 results:

- 1st coordinator of the Health societal challenge
- 396 contracts, inclunding 83 grant recepients and 53 Marie Skłodowska-Curie individual grants



### Close dialogue

with over 500 patient organizations for

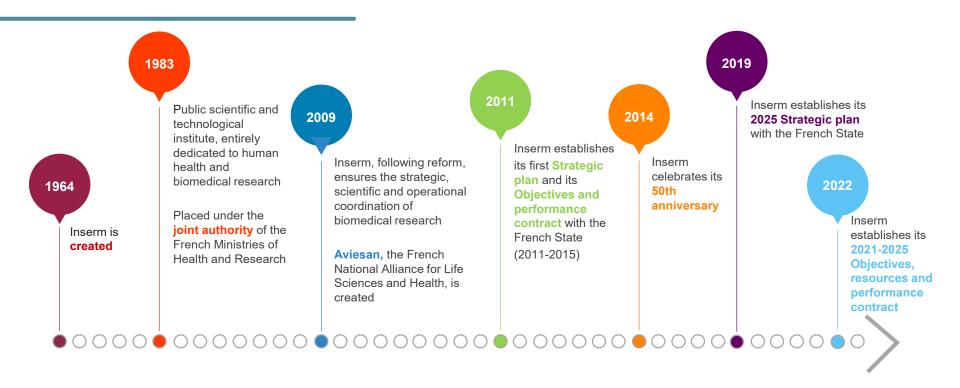
- · participatory research
- meetings and debates between patients and researchers



11,936 original articles



# Make changes to adapt





### Our organization

Professional Ethics Board
Ethics Committee
Ethics Evaluation Committee
Office for Research Integrity
Think Tank Network with Patient
Organizations (GRAM)
History Committee



Vice CEO for Strategy Thomas Lombès



Chairman and CEO

Didier Samuel

**General Directorate** 



Vice CEO for Administration **Damien Rousset** 

Management Board

Scientific Advisory Board

Specialized Scientific Committees

Research Support Committee

#### Thematic institutes

- Cancer
- Cell biology, development and evolution
- · Genetics, genomics and bioinformatics
- Health Technologies
- Immunology, inflammation, infectious diseases and microbiology
- Molecular and structural basis of living organisms
- Neurosciences, cognitive sciences, neurology, psychiatry
- · Pathophysiology, metabolism, nutrition
- · Public health

#### Divisions

- Communication
- Financial Affairs
- Human Resources
- · Information Systems
- Legal Affairs
- National and Foreign Affairs
- Open Science
- Program Assessment
- Strategic Program
- · Accounting Department

### Regional Offices

- Auvergne-Rhône-Alpes
- Est
- Grand Ouest
- Île-de-France (4)
- Nord-Ouest
- Nouvelle-Aquitaine
- Occitanie Méditerranée
- · Occitanie Pyrénées
- Provence-Alpes-Côte d'Azur and Corsica

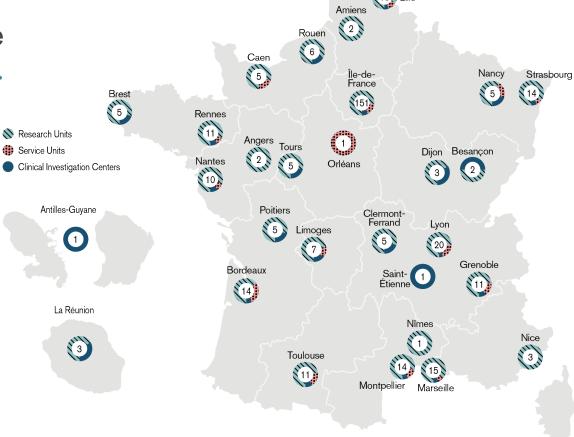


# Our presence in France

research units

48 service units

clinical investigation centers



18 Lille

# Our presence in France (2)

85% of Inserm Strengths in...

research universities, in which Inserm invests more than €10M each year





### Our main partners

- 35 universities
- A key partner of 14 research universities in which Inserm invests more than €10M each year
- On 14 Idex and I-sites, Inserm invests 85% of its resources
- Research units in 29 teaching hospitals

- Founding members of Aviesan alongside Inserm: CEA / CNRS / France Universités / INRAE / Inria / Institut Pasteur / IRD / Réseau CHU and the associate members
- Other alliances: AllEnvi, Allistène, Athéna
- Industry: Astra Zeneca/MedImmune, Dassault System 3DS, MSD Avenir, Sanofi...
- Foundations and associations: Fondation Bettencourt Schueller, FRM...
- European and international academic institutions: Helmholtz...



# Our presence in Europe

- Research teams: informal scientific cooperation with their partners
- Institutional partnership agreements and specific collaborative networks in Europe: 5 European laboratories within 2 thematic coordination programs, 12 leading international research projects (IRP), 2 within a single international research network (IRN), and 9 leading first step projects

- International joint research unit
- Thematic coordination programs
- International research projects
- ▲ International research network
- First step projects





# Our presence in the world

- Research teams: informal scientific cooperation with their partners
- Institutional partnership agreements and specific collaborative networks outside Europe: 3 non-European laboratories within 2 thematic coordination programs, 19 leading international research projects (IRP), 1 within an international research network (IRN), and 3 first step projects







# Inserm

La science pour la santé \_\_\_\_\_ From science to health



Take action to improve the health of all

### Our missions for health

Provide scientific expertise and support for science based policy in health



Create value from discoveries and their applications





Produce and disseminate knowledge nationally and internationally

INITIATE,
DEVELOP AND
COORDINATE
BIOMEDICAL
RESEARCH OF
EXCELLENCE

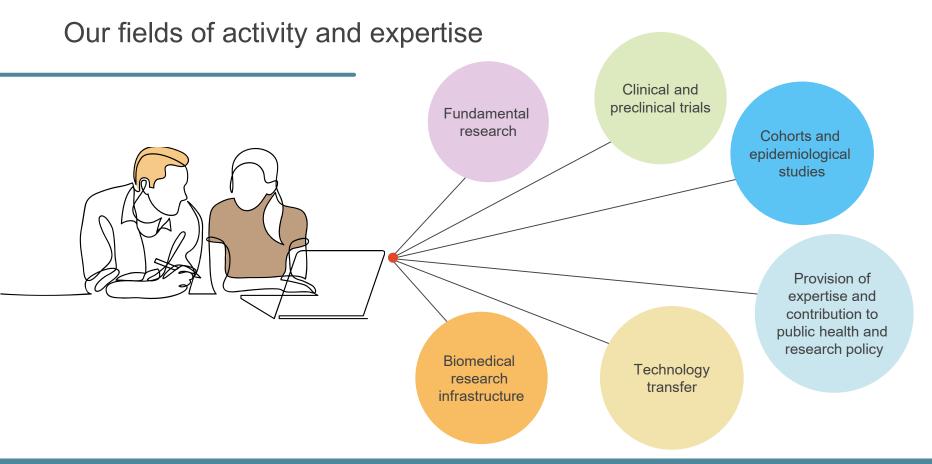


Play a major role in the national coordination of health research



Support higher education and research training







### Cohorts and epidemiological studies

# Over 1.6 million people (2% of the French

population) participating

in Inserm cohorts

### **EpiCOV**

130,000 volunteers for research on SARS-CoV-2

#### ELFE

20,000 children born in 2011, longitudinal study from birth to adult age

#### **Constances**

220,000 subjects representative of the French population, aged 18 to 69 years on inclusion + a biobank of 100,000 subjects

#### **RaDiCo**

over 5,000 people with rare diseases in 12 cohorts

Major public health expertise and research

databases,

accessible online

### Epidemiologie-France portal

French health database catalogue

> epidemiologiefrance.aviesan.fr

### CépiDc

Epidemiology center on the medical causes of death

> cepidc.inserm.fr

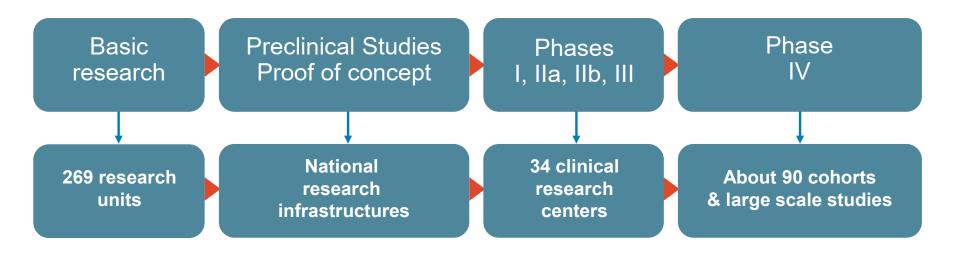
### **Orphanet**

Portal for rare diseases and orphan drugs

> orpha.net



# A continuum from basic to clinical, therapeutic, and public health research





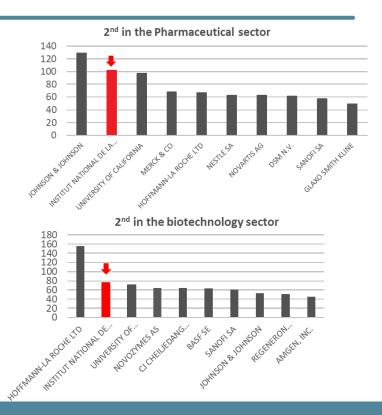
# Value creation activities which are bearing fruit

- 2,340 patent families portfolio
- 160 new patent families in 2022
- An annual budget of €1.8 M to fund project maturation or proof of concept
- A maturation budget reaching €23.3 M invested in 336 projects since 2009
- €495,5 M industrial partnerships since 2010 (patents, research contracts)
- €15-20 M per year from licensing agreements

- Over 400 technologies and research tools available for licensing
- Strategic alliances with, for example: Astra Zeneca/MedImmune, Dassault System 3DS, MSD Avenir, Sanofi
- 10 startups created each year via Inserm Transfert (Inserm's subsidiary)
- Partnerships with SATTs



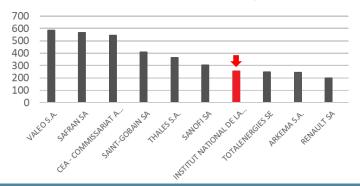
# Inserm & Inserm Transfert in EPO rankings



- No. 2 European applicant in the pharmaceutical sector (in the Top 3 since 2015)\*
- No. 2 European applicant in the biotechnology sector (4<sup>th</sup> year)\*
- No. 1 European research academic institution in the biomedical sector\*
- 2,340 patent families as of 31/12/2022







<sup>\*</sup> European Patent Office (EPO) 2022 rankings

# Inserm Transfert: partnering with industries

SOME OF OUR INDUSTRIAL PARTNERS: privileged partner of major industrials, mid-size, SME, involved in human health, at the international level





















































## Inserm spin-offs based on inventors as drivers



























































































### Major discoveries

Since its foundation in 1964, Inserm has played a part in many key, historic medical advances, such as:

- the first prenatal diagnostic tests;
- understanding the HLA system and the ensuing immune reactions;
- the first in vitro fertilization;

- identification of HIV;
- radiotherapy for cancer;
- the first skin graft;
- deep brain stimulation in the treatment of Parkinson's disease;
- gene therapy...





# Inserm

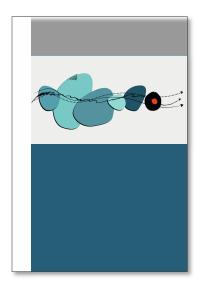
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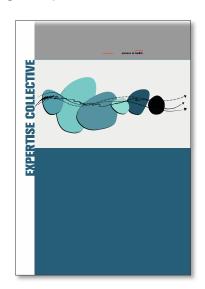


Disseminate knowledge for the benefit of all

### Collective expert reviews and contribution to public health policy

Inserm fulfils its mission of expertise provision and knowledge transfer to decision-makers in the field of public health by providing the scientific insight required to take decisions on public health policy issues.









# Our work with patient organizations

# Towards research in partnership with patient organizations and civil society collectives

- Promote meetings and direct dialogue between researchers and collectives
- Act for the structuring, coordination and animation of participatory research projects
- Help to better take into account these projects in the assessment of researchers and structures
- Facilitate access to scientific information for society



### Our presence in the service of public information

















Live lectures and 30' Santé broadcast

**34,500** views

Public events
1.8 million
participants and views



Meetings on participatory research

250 participants



Canal Détox information videos and articles

277,000 views





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# #FromScienceToHealth