

Grant-funded projects

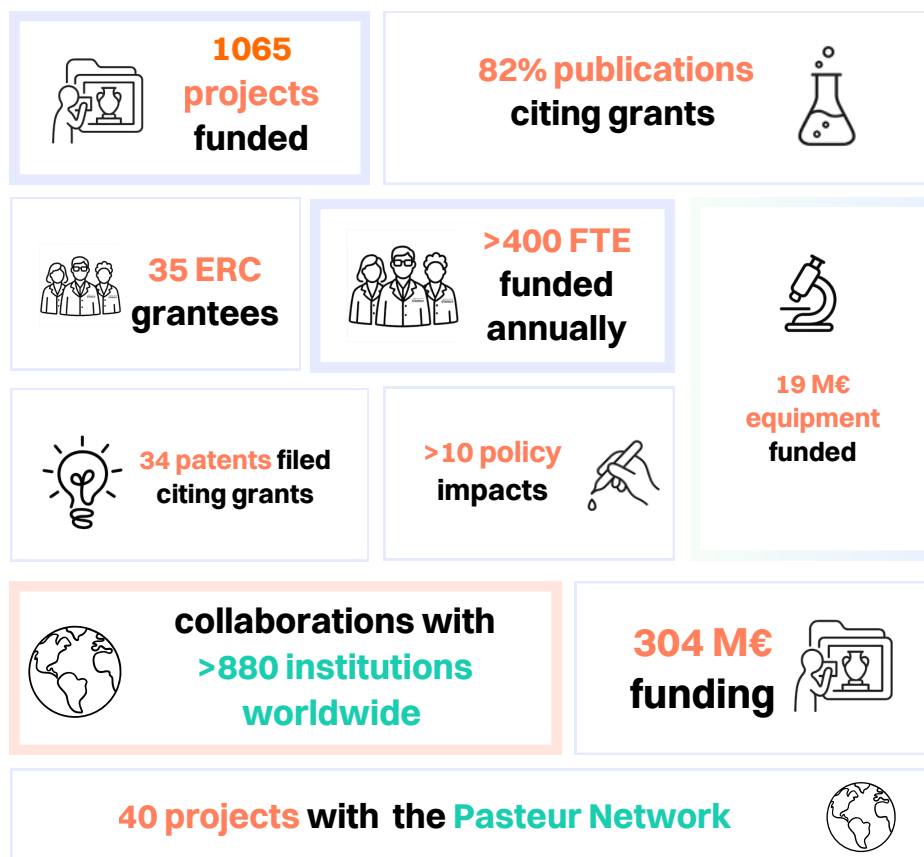
An institutional impact analysis

2019-2024



The Grants Impact Report

in 10 key figures



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Dr. Nazaré Guimard,
Head of the Grants Office

The Impact of grants

“Grants are more than a source of funding

They serve as strategic levers that shape our institution's direction, visibility, and sustainability. Grants drive scientific excellence, career development, and global engagement. They reinforce our capacity to innovate, attract talent, and translate knowledge into societal value.



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Purpose and scope

Why assess the impact of grants? More often than not, when discussing grants the focus is on the funding. This is indeed a central aspect of grants, but there are many others. It is important to have **metrics** for these other impacts that can help **create benchmarks, guide strategic decisions** and **inform scientists** of the best options for their research projects.

What is meant by a “grant?” The Grants Office (GO) defines grants as **research projects or individual fellowships** funded by **external funders** through **competitive calls for proposals**.

This report focuses on **grants managed by the GO over the period 2019-2024**, establishing a reproducible baseline for future analyses. **Aligned with our Strategic Plan, Pasteur 2030**, this report supports ongoing evidence-based assessment and decision-making to strengthen Institut Pasteur's sustainable growth and strategic management.

What makes this analysis unique: since its launch in 2018, the GO's operational data system, Grant Manager (GM) has collected large amounts of data, such as applicant names, project titles, acronyms, budgets, dates and more. This data allowed us to perform most of the analyses in this report. When necessary, we collected additional data from other support services to complete our analyses. Unlike previous *ad hoc* analyses, this report sets a standard for consistent, annual reporting and strategic dialogue.

Methodology and indicators

Our approach began with a **thorough mapping of grants' impacts**, identifying **seven key impact axes (Figure 1)**.

1. Funding
2. Scientific excellence and prestige
3. Innovation
4. Careers
5. Research infrastructure
6. Policy and society
7. International reach

From there, the goal of producing a first grants impact report took root.

With the sponsorship of the Direction of Transformation and Strategic Projects (DTPS), and with the collaboration of multiple support services, we narrowed the focus of our report to **specific Indicators along each axis with strategic relevance**, taking into consideration **data availability**. These metrics provide a comprehensive yet practical view of grants' impacts.

How to read this report

The analysis is structured in chapters, each focusing on one impact axis. **Each chapter represents a distinct timeframe or impact area**. Detailed notes on the **methodology and limitations** for all analyses are included **at the end of this report**.

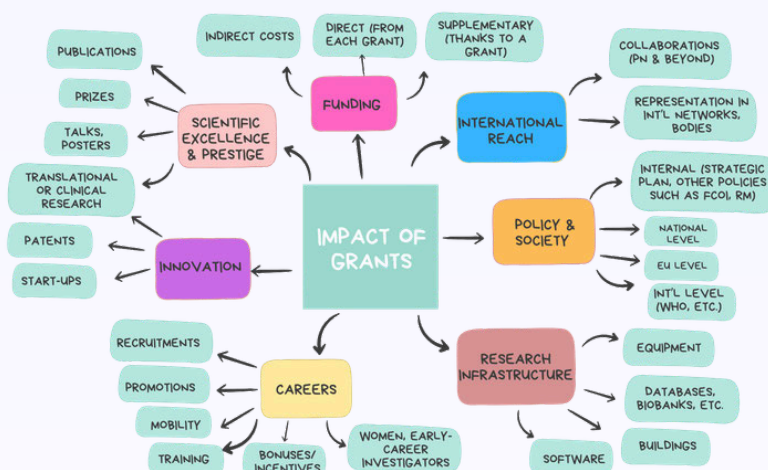


Figure 1: GO grants impact mapping exercise, early 2025

OVERVIEW



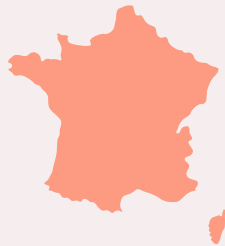
A diverse grant funding landscape with dedicated support teams

The Grants Office manages a portfolio of approximately 180 funders across the world that fund research projects and fellowships. Over the period from 2019-2024, **71 organisations funded Institut Pasteur**.

The Grants Office is organised into **3 divisions** according to the geographic origin of the funders. This ensures increased efficiency and expertise. Division team members are **experts** in grant funding, including pre-award, post-award, project management and project closeout. In addition, the Grants Office has **specialists** in grant writing, outreach, advocacy and innovation, offering our researchers a full panel of services.



GO National



~ **60 French funding agencies and private funders**
including ANR, ANRS-MIE, Region Ile-de-France, FRM and Sidaction

GO Europe



Exclusively European Union
within the framework programmes H2020, Horizon Europe and EU4Health

GO International



~ **120 International funding agencies and private funders**
including NIH, Gates Foundation and Wellcome Trust



The Grants Office team in the 2019-2024 period



Institut Pasteur gains momentum in grant funding

The past six years have shown impressive results in terms of submissions and funded projects. Institut Pasteur's researchers are submitting more proposals than ever before, assisted by the grant-writing support at the Grants Office. This has translated into greater numbers of funded projects.

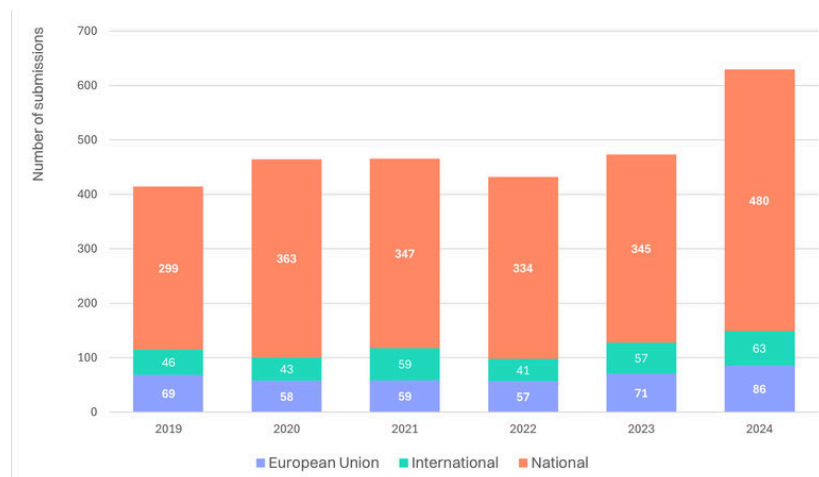


Figure 2: Number of submitted proposals, 2019-2024 (all types of grants)

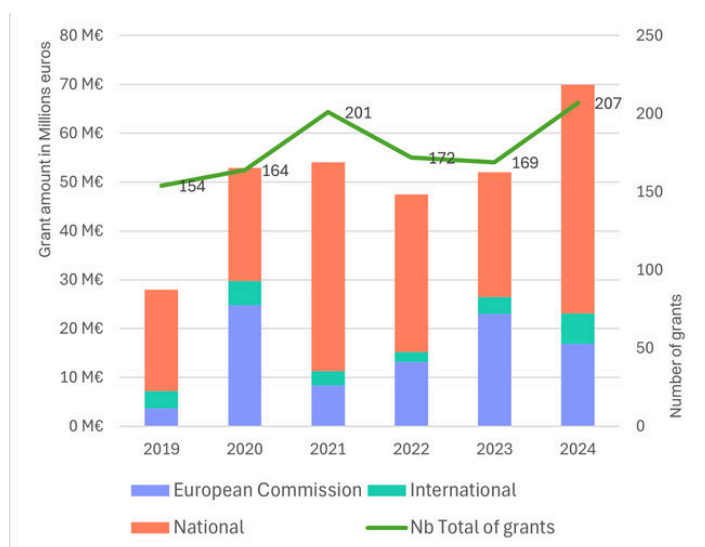
Submissions increased steadily in all three divisions of the Grants Office over the past six years — from 414 in 2019 to a **record 629 in 2024 (Figure 2)**.

**Our researchers submitted
2877 proposals
between 2019-2024**

During the same period, the number of funded grants increased. This includes mono-beneficiary grants, collaborative projects and fellowships. Funding has especially grown since 2022, with **2024 being a record year for both the number of grants and total funding awarded (Figure 3, Panel A)**.

**1065 funded projects
started from 2019 to 2024
for over
304 M€ in funding**

A



B

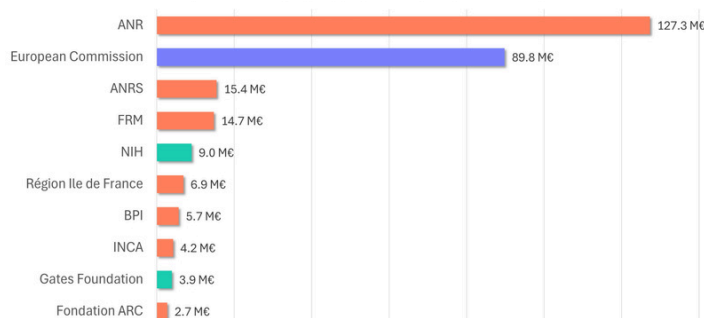


Figure 3: Awarded funds to Institut Pasteur teams by funder, projects starting in the years 2019-2024.

Panel A: Funds awarded per year. Note: may overlap partly with submissions above. The green line depicts the number of funded projects. Panel B: Top funders for the whole period.

*Note: The presented figures exclude the exceptional 38M€ IHU Re-Connect grant obtained in 2024, awarded to the Hearing Institute (IDA). Including this award would increase the total 2024 funding for Institut Pasteur to over 108 M€ and the six-year total to nearly 339 M€.

These figures represent only the amounts allocated directly to Institut Pasteur teams. Therefore, they do not reflect the entire financial scale of many large collaborative grants. Projects coordinated by Institut Pasteur, such as those funded by the European Union, the NIH, or the Gates Foundation, involve substantial budgets that are allocated across all partner institutions. While our organisation manages and disburses the entire consortium budget, this report only displays the funds assigned directly to Institut Pasteur research units.

Top Funders

**75% of funding
came from public organizations**

ANR, with its dedicated call for proposals and the operating of “investing for the future” programmes is by far the largest funder, followed by the European Union.

More detail is provided about the results of each division on the following pages.



National funding: unparalleled support

In terms of volume of funding and number of projects, French funders dominate:

855 grants (80%) during this report period, for 229 M€.



The GO National portfolio includes 41 funders, the largest of which by far is the **Agence Nationale de la Recherche (ANR)**, with 166 M€. The main funding instrument of the ANR is the “**Appel à Projets Générique**” (AAPG). This call is composed of 5 different mechanisms: young researchers (JCJC), collaborative projects with enterprises (PRCE), single-team research projects (PRME), collaborative projects (PRC), and international collaborative projects (PRCI). **Between 2019 and 2024, the ANR funded half of all nationally-funded projects (428), most through the AAPG.** Additional calls during this period included Flash COVID-19 calls (discussed on page 9), infrastructure calls and others.

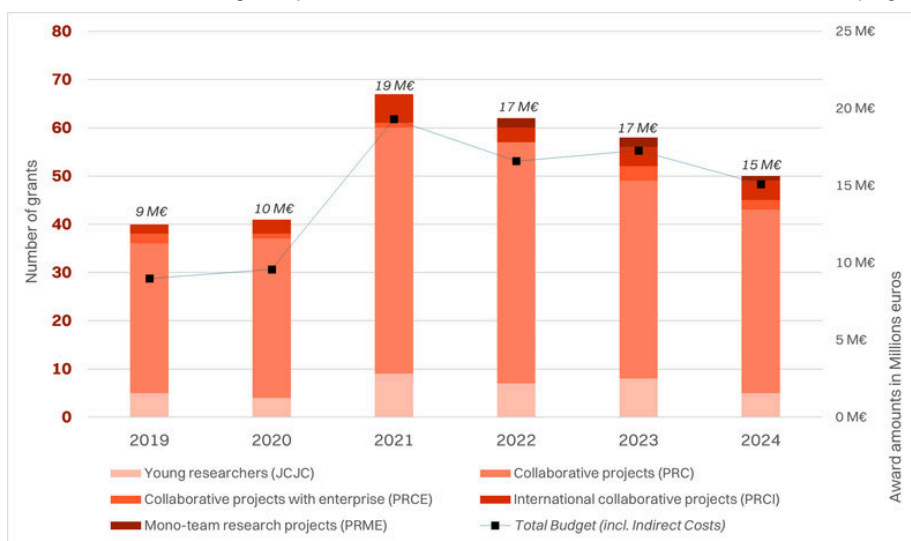


Figure 4: Results of the ANR AAPG 2019-2024 editions. Black dots depict awarded funds.

Over the 6-year report period, Institut Pasteur had

318 ANR AAPG-funded projects

and a 36.5% success rate

vs. 21.3% at the national level.

Note that in 2021, the ANR's intervention budget witnessed an unprecedented increase, from 746 M€ to 1.19 B€ in commitment authorisations, thanks to the support of the [France Relance 2030 Plan](#) (France 2030).

The ANR is followed by [Fondation pour la Recherche Médicale](#) (FRM, 16.1 M€), [ANRS-MIE](#) (15.9 M€), the [Région Ile-de-France](#) (7.1 M€) and [Bpifrance](#) (5.7 M€). The national portfolio also includes dedicated cancer funders such as [Ligue Contre le Cancer](#) (LNCC) and [Institut National du Cancer](#) (INCa).

“Programmes d'investissement d'avenir”

Since 2010, France has made substantial investments through the Programmes d'investissements d'avenir (PIA), now part of **France 2030 (32 projects since 2021 - 30.7 M€)**. These programmes have significantly contributed to Institut Pasteur's scientific strategy and project development:



- **Excellence Laboratories (LabEx):** Institut Pasteur coordinates three LabEx programmes funded from 2011 to 2027: [Revive](#) (Regenerative Biology & Medicine), [IBEID](#) (Integrative Biology of Emerging Infectious Diseases), and [Milieu Intérieur](#) (Towards Personalised Medicine).
- **Convergence Institutes:** Institut Pasteur coordinates [INCEPTION](#), funded from 2017 to 2026.
- **Chairs of excellence:** 4 chairs started between 2019 and 2024 (9 M€)
- **Priority Research Programme on Antimicrobial Resistance (PPR-AMR):** In 2020, 9 projects (including two as coordinator), representing a total of 6.7 M€.
- **Hospital-University Research Projects (RHU):** 5 RHU projects (total of 6.9 M€).
- **Priority Research Programmes and Equipment (PEPR):** Institut Pasteur contributes to several PEPR programmes - MIE (infectious diseases), PREZODE (zoonotic pathogens), SAMS (microbiome & health), SantéNum (digital), BBTI (biotherapies), MoleculArXiv (molecular data storage), PROPSY (precision psychiatry), ORIGINS (planets & life), and CELL-ID (Cellular identities and destinies) - with 19 awarded contracts totalling 12.1 M€.
- **Hospital-University Institutes (IHU):** In 2023, Institut Pasteur was involved in two IHU projects: coordination of [Re-Connect](#) (38 M€) and partnership in [Institut du Cerveau de l'Enfant](#) (1.1 M€).

12 Pasteur-led EU collaborative projects 2019-2024

Read more in "International Reach" p 14-15.



PasteurDoc

International doctoral training for early-career researchers
2015-2020



SAFE-Aqua

Sustainable farming and improvements in aquaculture biosecurity
2017-2020



International project on clinical, molecular, and social factors impact cutaneous leishmaniasis
2018-2023



Global social sciences network for infectious threats and antimicrobial resistance
2019-2022



Exploring the fungus-host microbiota interaction to improve management of fungal infections
2019-2023



Developing optogenetic cortical implants to restore hearing
2021-2023



Collaborative EU biophysics research infrastructure
2021-2025



Advancing serological testing and targeted treatments for malaria (*Plasmodium vivax*)
2022-2027



Investigating risk and resilience in developmental diversity and mental health
2022-2027



Unified research alliance of biomedical and public health labs against epidemics
2023-2027



Disaster risk and health emergency management in urban contexts
2024-2027



Deconstructing yellow fever vaccine immunity to inform new flavivirus vaccine design
2024-2028

FOCUS - EUROPE

Pasteur: a top-tier European actor



Between 2019 and 2024, Institut Pasteur confirmed its position as a leading European research institution, with EU funding resulting in a

28.7% overall success rate.

Over this period, research teams submitted **512 proposals** to European programmes and secured

147 funded projects for 112.5 M€.

Of these, **89 were collaborative research grants (total funding of 79 M€).**

This portfolio reflects Institut Pasteur's critical contributions to European programmes such as [H2020](#), [Horizon Europe](#), [EU4Health/HERA](#), and [EDCTP](#).

In addition, Institut Pasteur contributed to [ERA4TB](#) (European Regimen Accelerator for Tuberculosis, H2020 IMI): a major international collaboration launched in 2020 for 7 years (12 M€).



Institut Pasteur is ranked 2nd French beneficiary of the Health cluster after INSERM, 3rd for EDCTP (data from MESR).

European Research Council (ERC)

The [ERC programme](#) provides funding to researchers of any nationality and age to run projects across Europe. The ERC's mission is to **promote the highest quality research in Europe** through competitive funding and to support **investigator-driven frontier research** across all fields based on scientific excellence. The ERC offers five core grant schemes: Starting, Consolidator, Advanced, Synergy & Proof of Concept.



European Research Council
Established by the European Commission

Between 2019 and 2024, Institut Pasteur secured a total of

35 ERC grants* (44.1 M€)

ERC type	PI profile	Typical budget & duration	Objective	IP Grantees
Starting	2-7 years after PhD	~€1.5 M€, up to 5 years	Establish first research team/programme	12
Consolidator	7-12 years after PhD, consolidating independence	~€2 M€, up to 5 years	Build/strengthen own team or programme	10
Advanced	Senior leaders with major achievements	~€2.5 M€, up to 5 years	Enable high-risk, ground-breaking projects	4
Synergy	2-4 PIs with complementary expertise	~€10 M€, up to 6 years	Jointly tackle questions beyond a single PI's capacity	7
PoC	Proof of concept	€150 k€, up to 18 months	Bridge from ERC research to innovation/valorisation	2

Table 1: Results ERC, editions 2019 - 2024

*including 14 OREX from INSERM and CNRS

Since 2021, Institut Pasteur's Grants Office has been offering dedicated grant writing support to ERC candidates conducting their projects on campus, regardless of whether or not they are employed directly by Institut Pasteur (OREX researchers). This has delivered tangible results: from 2019-2024, Institut Pasteur had a

34% success rate; over twice the European average of 14%.



International funding: research on the global stage

96 projects were funded amounting to **23 M€ in funding**



The NIH led in funded projects (22) and awarded funds (9 M€).

From 2019 to 2024, **Institut Pasteur ranked 3rd among the 14 French beneficiaries of NIH funding as coordinators**, in front of INSERM and IRD. This elevated position reflects the global recognition of Institut Pasteur's expertise and excellence by the world's largest public funder in the biomedical research field.

The [PICREID](#) project (coordinated by Prof. Anavaj Sakuntabhai & Dr. Etienne Simon-Lorière) established an **Emerging Infectious Disease Research Center** in Southeast Asia and West/Central Africa with an **inter-continental One Health approach** designed to improve the capacity to respond rapidly and effectively to outbreaks. Researchers studied factors influencing emergence and transmission at the virus, vector and reservoir level, leading to epidemics in suspected spillover conditions.



Vector samples were collected by Institut Pasteur du Cambodge and analysed at the Pathogen Discovery lab at Institut Pasteur Paris.



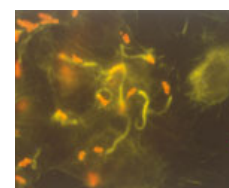
The project focused on **high priority RNA viruses** with epidemic potential in Africa (Rift Valley Fever virus, Crimean Congo Hemorrhagic Fever Virus) and in Southeast Asia (dengue virus), as well as viruses (Disease X) identified from symptomatic surveillance or vector sampling. This project included 6 Pasteurian teams and an international consortium with several members of the Pasteur Network (see also p. 15).

In 2025, the NIH entered a deep crisis, leading to an unprecedented halt of many collaborations with non-U.S. entities. The Grants Office will address this chaos and its consequences on Institut Pasteur in the next impact report.

Gates Foundation **Gates Foundation: the second largest international funder**

Nearly 4 M€ were awarded to Institut Pasteur teams in 15 grants. These projects focused on fighting infectious diseases affecting low-income countries, such as *Klebsiella* infections, malaria, tuberculosis and polio, as well as studying immunity during pregnancy.

Since 2018, the **Gates Foundation actively supports GlycoShig**, an emblematic program combining academic, clinical and translational research to **develop a vaccine against *Shigella***, a WHO priority pathogen. Defeating shigellosis is a major public health goal in endemic



S. flexneri intracellular movement visualization
© Institut Pasteur

areas, where this diarrheal disease causes high burden and potentially life-threatening risks to young children. A close collaboration bridging chemistry, vaccinology and microbiology between Dr. Mulard's and Dr. Phalipon's teams led to SF2a-TT15, a synthetic carbohydrate-based conjugate vaccine candidate targeting the most prevalent *Shigella* serotype. Its successful first-in-human evaluation cemented GlycoShig's ambition, leadership and attractiveness.

During the 2019-2024 period, **the Gates Foundation awarded 2,7 M€ in 5 grants to Institut Pasteur** (nearly 700 K€ for Pasteur teams), **alongside a Wellcome full contribution of 2,8 M€**, to further test SF2a-TT15 in two clinical trials. Notably, a phase 2a clinical trial in 9-month-old infants in Kenya yielded highly promising results. Data from this Institut Pasteur-sponsored study strongly support advancing the quadrivalent *Shigella* glycovaccine candidate—co-developed during this period through a DARRI-managed partnership with the Gates Medical Research Institute—to human evaluation.

A diverse funding portfolio to support Pasteurians' varied research focuses

Beyond NIH and Gates, **a diverse range of funders have granted a total of 10 M€ in 59 grants to Institut Pasteur.**

Notable among these are well-known organisations such as [Human Frontier Science Program](#) (HSFP) that contributed **1.5 M€ through 8 grants**, and [Wellcome](#), which provided **1.5 M€ through 7 grants** (including the GlycoShig grant mentioned above).

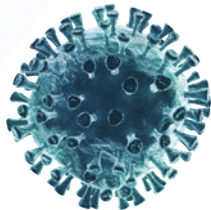


Additionally, several **competitive but promising newcomers** have emerged. For instance, the [Cancer Grand Challenges](#) awarded 1.8 M€ in a single grant, and the [Chan Zuckerberg Initiative](#) granted 300 K€ across 2 grants.

Private U.S. foundations typically focus on specific health conditions. Examples include the [Foundation Fighting Blindness](#), which awarded 650 K€ to one project; the [Juvenile Diabetes Research Foundation](#), with 600 K€ allocated across 2 grants; and the [Alzheimer's Association](#), which provided 290 K€ through 2 grants.

Researchers with strong international collaborations also benefit from support by national agencies or foundations promoting partnerships with domestic research institutions. Noteworthy among these are the [Swiss National Science Foundation](#), which provided 865 K€ through 2 grants, and the Korean [RIGHT Foundation](#), awarding 340 K€ in a single grant.

The COVID-19 pandemic from a grants perspective



Among the many effects of the COVID-19 pandemic was a **wave of additional grant funding**, leading to a spike in grant proposal submissions by Pasteurians: an increase of 12% was observed in 2020 compared to 2019 (Figure 2 on page 5). The Grants Office was fully mobilised during this period, preparing weekly updates on COVID-19 calls for

proposals for the COVID-19 Task Force and assisting researchers with their applications.

- The ANR published [3 specific calls for proposals](#): Flash, RA-COVID-19 and Résilience COVID-19. These calls funded 279 projects for 35.6 M€ throughout France, of which 29 involved Institut Pasteur. In addition, a COVID-19 priority was added to the 2021 and 2022 AAPG. In total, ANR funded 31 projects at Institut Pasteur for 1.8 M€.
- ANRS launched [2 long COVID calls](#) as well as several other calls, leading to 13 funded projects at Institut Pasteur (2.5 M€).
- INSERM funded [20 research projects](#) in France through its REACTing consortium (4 at Institut Pasteur, 406 K€).
- The EU launched **2 emergency calls** in response to the pandemic, bringing 176.2 M€ in funding to 42 research projects throughout Europe. Beyond the emergency calls, the EU mobilized all of its financial mechanisms in response to the pandemic. In 2021 the [European Commission's Directorate-General for HERA](#) (Health Emergency Preparedness and Response Authority) was established, with the launch of the [EU4Health programme](#), both of which created significant funding opportunities for Institut Pasteur in the field of pandemic preparedness, including its involvement in the [DURABLE project](#) (see page 15) and the [European Vaccine Hub](#). In total, Pasteurians received 11 grants for 3 M€ from the EU.

The NIH, Gates Foundation, Wellcome and others also funded grants to Institut Pasteur in response to the pandemic.

The particularity of these calls was their urgency: some had deadlines that were two weeks after publication, such as the EU emergency calls. By comparison, a typical EU Horizon project requires several months' preparation.

From 2020-2022*
Pasteurian researchers applied to
>30 calls for proposals
related to the COVID-19 pandemic
71 proposals were funded for 10.6 M€

Notable examples include 6 grants funded through the ANRS / Santé Publique France [EMERGEN platform](#). These grants (led by Dr. Simon Cauchemez, Dr. Xavier Montagutelli, Dr. Felix Rey, Dr. Marie-Noëlle Ungerheuer and Pr. Sylvie Van der Werf) received a total of 1.7 M€ in funding. They included studies on the biological characterisation and genomic evolution of variants, transmission of SARS-CoV-2, humoral immune response to COVID-19 vaccination and funds to strengthen research infrastructure, particularly related to animal models.

The [ISIDORE](#) project (led by Kenneth Vernick) aimed to assemble the largest and most diverse research and service providing instrument to study infectious diseases in Europe, in particular COVID-19. The [LEAPS project](#) (led by Thierry Rose) aimed to pioneer a proactive, stakeholder-validated strategy for genomic surveillance to improve pandemic preparedness and response.

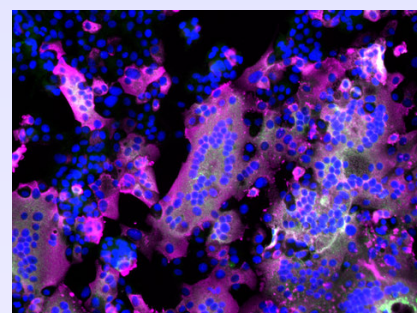
*COVID-19 related projects funded in the following years are not included in this analysis.



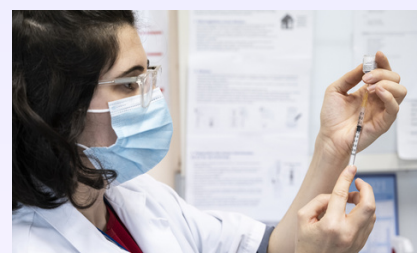
First meeting of the Task Force on the novel coronavirus which involved leading scientists from Institut Pasteur in each of the key disciplines and some support departments, March 3rd, 2020.
 Credit: Institut Pasteur / François Gardy



PCR test detection of SARS-CoV-2.
 Credit: Institut Pasteur/François Gardy



Immunofluorescence staining of cells infected with the SARS-CoV-2 virus isolated from the brain of an infected hamster. Two viral proteins are stained: spike protein (green) and nucleoprotein (pink). The cell nuclei are stained blue. Credit : Institut Pasteur/Anthony Coleon



COVID-19 vaccination at the Institut Pasteur Medical Center. Credit: Institut Pasteur/François Gardy

For a deeper look into the institutional response to the pandemic, read ["Anatomie d'une pandémie."](#)



Fellowships: a pathway to research independence

Fellowships specifically help individuals in the pursuit of study or research. They often serve as the **critical bridge** to a higher level of study or a permanent position.

209 fellowships were secured during the 2019-2024 period, for total funding of **19.8M€**. This represents **7%** of total awarded grant funds.



Camille dos Santos-Toinet
2nd-year PhD student,
ANRS-MIE Fellow,
Cellular Biology of Microbial
Infection Unit



Dr. Clarisse Ganier
MSCA Postdoctoral Fellow
Meta-Organism Unit



Dr. Aleksi Isomursu
ARC Postdoctoral
Fellow,
Cell Polarity, Migration
and Cancer Unit



Dr. Basile Beaud
Former 4th-year PhD
student, FRM "End of
thesis" Fellow.
Currently Postdoctoral
Fellow, Evolutionary
Biology of the Microbial
Cell Unit

**113 PhD students,
91 postdocs
& 3 master students
were funded***

*excluding LabEx funding

Top funders of fellowships include the **Fondation pour la Recherche Médicale** (6.2 M€), the **EU** (5.5 M€), the **Agence Nationale de Recherche pour le Sida** (2.5 M€), **ARC** (Fondation pour la recherche sur le cancer - 1.2 M€) & **Région Ile de France** (830 K€).



FRM "Espoirs de la recherche"

From 2019 to 2024, the **Fondation pour la Recherche Médicale (FRM)** awarded 89 "Espoirs de la recherche" fellowships at Institut Pasteur, totalling 6.2 M€. This investment supported 72 doctoral students, 15 postdoctoral fellows, and 2 master's students, highlighting FRM's crucial role in fostering graduate and early-career scientific talent at Institut Pasteur.



Marie Skłodowska-Curie Actions (MSCA)

MSCA Postdoctoral Fellowships support the creative and innovative potential of postdoctoral researchers looking to acquire new skills through advanced training, international, interdisciplinary, and inter-sectoral mobility.

From 2019 to 2024, Institut Pasteur obtained

29 MSCA fellowships, totalling 6 M€.

The programme's success rate at the institute reached **31%**, significantly higher than the **EU average of 15.6%**, demonstrating the excellence and competitiveness of Institut Pasteur's early-career researchers.



Supporting the hidden costs of research

Indirect costs (IDC), often called overheads, are essential expenses covering vital infrastructure, administrative services, compliance, and shared resources that enable all research activities on campus. Understanding these IDC dynamics helps researchers and administrators align grant strategy with both scientific mission and institutional sustainability.

2019–2024 at a glance

- **IDC recovered on funded projects managed by the GO grew from 2.6 M€ (9.6% of awarded funds) in 2019 to 11.3 M€ (16.1%) in 2024 (Figure 5).**
- A major driver was ANR's contractual change (from 19% in 2019 to 30% in 2024), **including a funding mechanism called “Préciput,”** which pays additional IDC one year after signature.
- Almost one in three projects carry 0-7% IDC, while six in ten fall between 8-25%.

Financial challenges in funding strategic research topics...

Key research themes aligned with Institut Pasteur's strategic topics — such as cancer, infectious diseases, HIV/tuberculosis/hepatitis, neurological disorders, and rare diseases — **generally have lower IDC rates** (2.2% to 7% — Figure 6) compared to projects funded by **non-thematic calls, which average about 16.7%.** Furthermore, topics such as cancer and HIV are often ineligible for funding through the ANR's generic calls for proposals, which exclude these strategic topics from the main institutional funding streams.

It is essential for Institut Pasteur to **cross-subsidise research** in these themes with **more flexible grants, targeted fundraising, and deliberate financial management** to sustain excellence across all domains.

... and recruiting young talents

Fellowships typically recover less IDC than research grants (Figure 7), yet they are vital for fostering the independence of early-career researchers and attracting top talent to the campus. Fellowships complement research grants, supporting both the professional development of promising investigators and the scientific objectives of Institut Pasteur (see page 10).

Distribution of IDC rates and funding types

- **Public vs private:** Public funders average 15.9% IDC, while private funders average 5.4%.
- **Topic-focused grants:** Note that specialised public funders such as ANRS-MIE also apply constrained IDC rates.
- **Research grants vs. fellowships:** Research grants recover 15.2% IDC, and fellowships recover 5.1%. Fellowships generally prioritise direct costs and salaries, but still rely on institutional support.

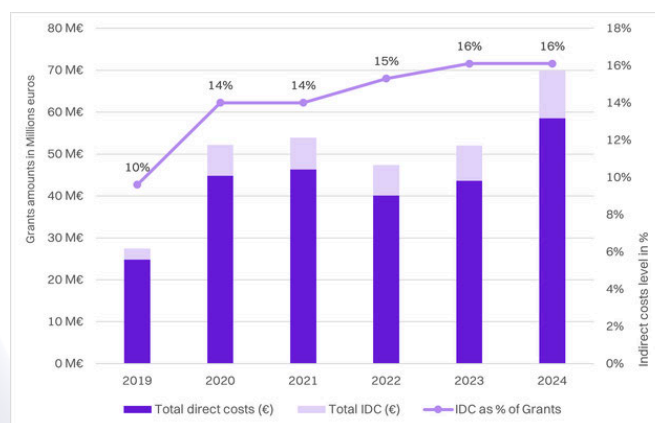


Figure 5: Share of IDC in funding awarded, 2019-2024

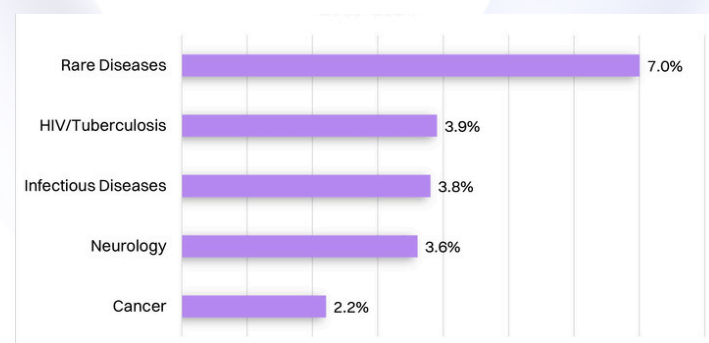


Figure 6: Average indirect cost rates per research topic, 2019-2024

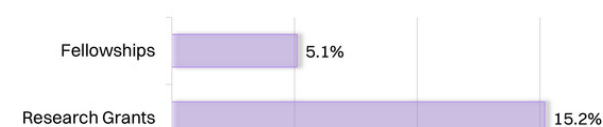


Figure 7: Average indirect cost rates for fellowships vs. research grants

Institutional response and strategic outlook

As a private, non-profit foundation, Institut Pasteur cannot rely on surpluses alone to cover overhead shortfalls. Sustaining excellence requires:

- **maintaining grant funding** for strategic research topics and fellowships that attract talent
- A **balanced portfolio approach** mixing high and low IDC projects;
- Active **advocacy** with funders for fair IDC policies,
- **Targeted philanthropic partnerships** explicitly supporting indirect costs.



From proposals to papers and recognition

Publication output & impact

From 2019 to 2024, Institut Pasteur-affiliated researchers produced

7508 scientific papers;
82% cited at least 1 grant

(Figure 8). Nearly half cited between 2 and 5 grants. It is important to note that citing funding is required by all grant funding agencies.

When focusing on either research articles or reviews, reviews tend to cite fewer grants and are twice as likely to omit a funding statement (30%) compared to articles (14%). Notably, **20% of all published work falls within the top 25% for field citation impact**, demonstrating significant influence on scientific progress. In line with institutional policy (Pasteur is a signatory of [DORA](#) and [CoARA](#)), impact factor analysis is avoided, with emphasis placed on citation-based metrics and open, responsible evaluation.

When analysing the external funders cited in the **1622 publications led by Institut Pasteur** (first and/or corresponding author) from 2019 to 2024, the funding profile clearly demonstrates the decisive strategic weight of national and European Union grants in empowering Institut Pasteur's scientific leadership.

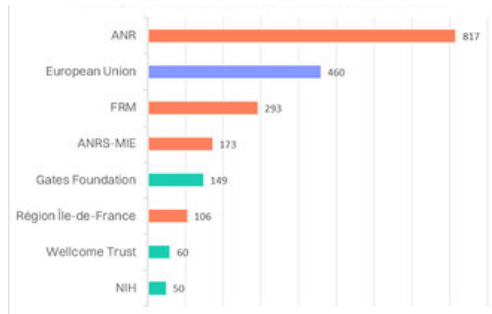


Figure 9: Top funders cited in publications with first or corresponding author from Institut Pasteur, 2019 -2024

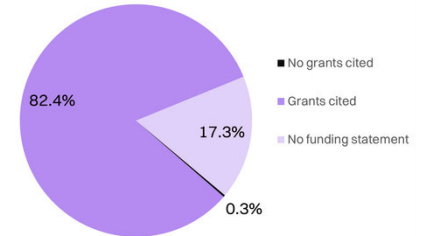


Figure 8: Percentage of publications citing grants 2019 -2024



Cover of Nature's 8,000th issue (February 2024) featuring Institut Pasteur research funded by LabEx Milieu Intérieur, generating 216 press articles worldwide and ranking in the top 3% of Nature articles.

Wider funding ecosystem

Across all these 7508 publications involving researchers affiliated to Institut Pasteur, **ANR remains the most-cited funder**, followed by U.S. federal agencies (HHS/NIH) and a diverse range of global actors. This demonstrates the Institut Pasteur's deep integration into international research collaborations, with citations sometimes reflecting historical or partner-based funding.



ERC leadership and international prestige

Institut Pasteur's reputation is further enhanced by the funding of **35 ERC grantees**, ranking among France's top institutions for ERC success. While many grants are prestigious, ERC awards in particular—both individual and in synergy—are widely regarded as markers of scientific excellence, enabling elite, high-risk science. Numerous **ERC grantees have gone on to win other prestigious awards**, such as Nobel or Field awards. Holding ERC grantees reinforces Institut Pasteur's credentials on the European and global stage.

Two Institut Pasteur researchers won ERC Consolidator Grants during the 2019-2024 editions after having previously held Starting Grants, illustrating the springboard effect of this programme. Another example of this effect is the programme **Impulscience** from the Fondation Bettencourt, which funds ERC applicants that are highly ranked by ERC ("A") but ultimately not selected. **Three Pasteurian researchers received Impulscience funding in the last six years.**



Dr. David Bikard: ERC CoG 2021 (StG 2015) for his project "*In situ* genetic perturbation of gut bacteria with engineered phage vectors and CRISPR"



Dr. Michael White: ERC CoG 2024 (StG 2019) for his project "Understanding long-term trends in multi-pathogen epidemiology in Africa using multiplex serological and molecular assays"



A focused survey sent to 24 PIs shows that:

72% revealed strong perceived impacts regarding **increased visibility and recognition of their research**

- 80% generated high-impact publications
- 80% resulted in conference invitations
- 75% enabled further grant opportunities
- 45% led to research prizes



Bridging the gap from research to the market

Grant-funded research at Institut Pasteur generates not only scientific knowledge but also translatable innovations that advance from discovery through patents and licenses to commercial ventures, creating societal value and economic impact beyond academic publications.

Patents Nearly 1 out of 4 patent applications filed from 2019-2024 cited grant funding.

Among these 139 patent applications, 57 cited funding on their invention declarations; of those, 34 (60%) mentioned grants, either exclusively or paired with other sources of funding. 23 (40%) cited internal (e.g. DARRI, COVID Task Force, Transverse Research Programmes —PTR—) and/or corporate funding only (Figures 10 & 11).

Top-cited funders were ANR (14 citations) and the European Union (11 citations), of which 6 were ERC, underscoring ERC's role as a driver of high-value innovation.

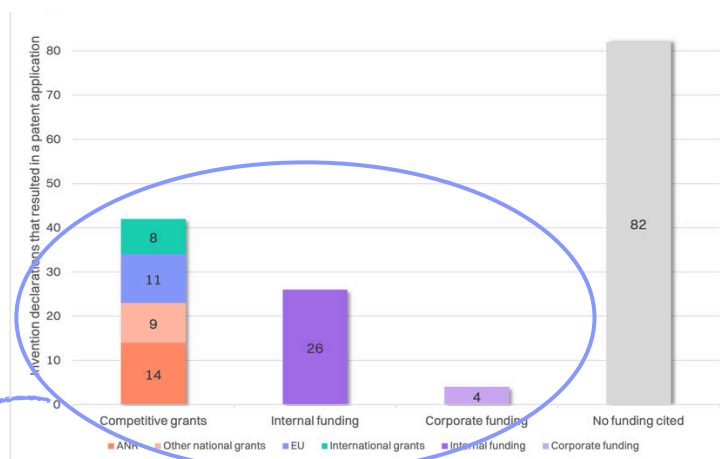


Figure 10: Funding citations in Invention Declarations that resulted in patent applications, 2019 -2024. In some instances multiple sources of funding were cited.

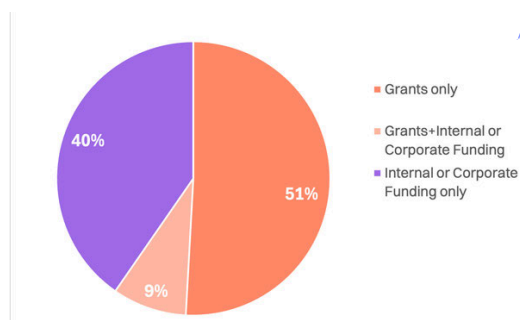


Figure 11: Distribution of funding sources in the 57 patent applications which cited funding in their invention declarations, 2019 -2024

Licenses

Of the 139 patents applications, 9 resulted in a license: a contract through which the patent holder grants a third party the right to exploit the patented invention in exchange for compensation, usually in the form of royalties.

8 out of 9 licenses cited grant funding

Start-up launches

Six start-ups were launched between 2019 and 2024:

- **Avatar Medical** - 3D medical imaging and surgical planning (Dr. J.-B. Masson), 2020
- **Okomera** - microfluidic organoids & drug testing (Dr. Ch. Baroud), 2020
- **SPIKIMM** - monoclonal antibodies (mAbs) for the prevention of infections in transplant patients (Dr. H. Mouquet), 2021
- **V4C** - mRNA dengue vaccine (Prof. A. Sakuntabhai), 2022
- **NBX Biosciences** - gut-brain therapeutics (Dr. D. Rei), 2023
- **Biocellis** - bioluminescent immunoassays (Dr. Th. Rose), 2024

Of the four PIs that responded to our inquiry, all confirmed that grants contributed alongside internal support to the launch of their start-up. As with patents, the funding was often a combination of grants and other sources. **EU funding was the most cited.** National funders were also mentioned.

Dr. Mouquet highlighted the **importance of internal funding** such as the COVID-19 Task Force, as well as Institut Pasteur support in a broader sense; a recommendation by Institut Pasteur's upper management helped secure his Fondation de France grant.



Prof. Anavaj Sakuntabhai
Co-creator of V4C



*"It all started with the [EU FP7 funded] **DENFREE project**, which revealed that people who experience asymptomatic dengue infections still mount a strong T-cell response to the virus. Building on this insight, we designed a dengue T-cell epitope and conducted a proof-of-concept study in an HLA transgenic mouse model, supported by an internal Institut Pasteur grant through the Dengue Task Force. The promising results led us to file a patent for our approach. Encouraged by this success, the DARRI suggested that we explore the creation of a start-up dedicated to developing a dengue T-cell vaccine. With funding support from Pasteur-Carnot Microbe-Santé, we engaged a business adviser and prepared a proposal for the i-Lab innovation competition. Our project went on to win the Grand Prix, paving the way for the official launch of our start-up and the continuation of our mission to advance next-generation dengue vaccines."*



Pasteurian research across every continent

International collaborations are a vital dimension of Institut Pasteur's research impact, enabling knowledge exchange and resource sharing. Grants can offer the potential for greater international reach, extending possibilities for new collaborations around the globe or reinforcing existing collaborations.

From 2019 to 2024, **Institut Pasteur participated in 174 international collaborative projects** (80 European, 13 ERA-NET, 57 internationally-funded & 24 nationally funded).

In these 174 projects, Institut Pasteur collaborated with over **880 institutions worldwide** (excluding around 100 French institutions), including Harvard, MIT, Yale, Stanford, Oxford, Cambridge, Max Planck & many more.

In total, over **1470 collaborations took place with partners outside of France** (some institutions collaborated with Institut Pasteur multiple times), from every continent except Antarctica.

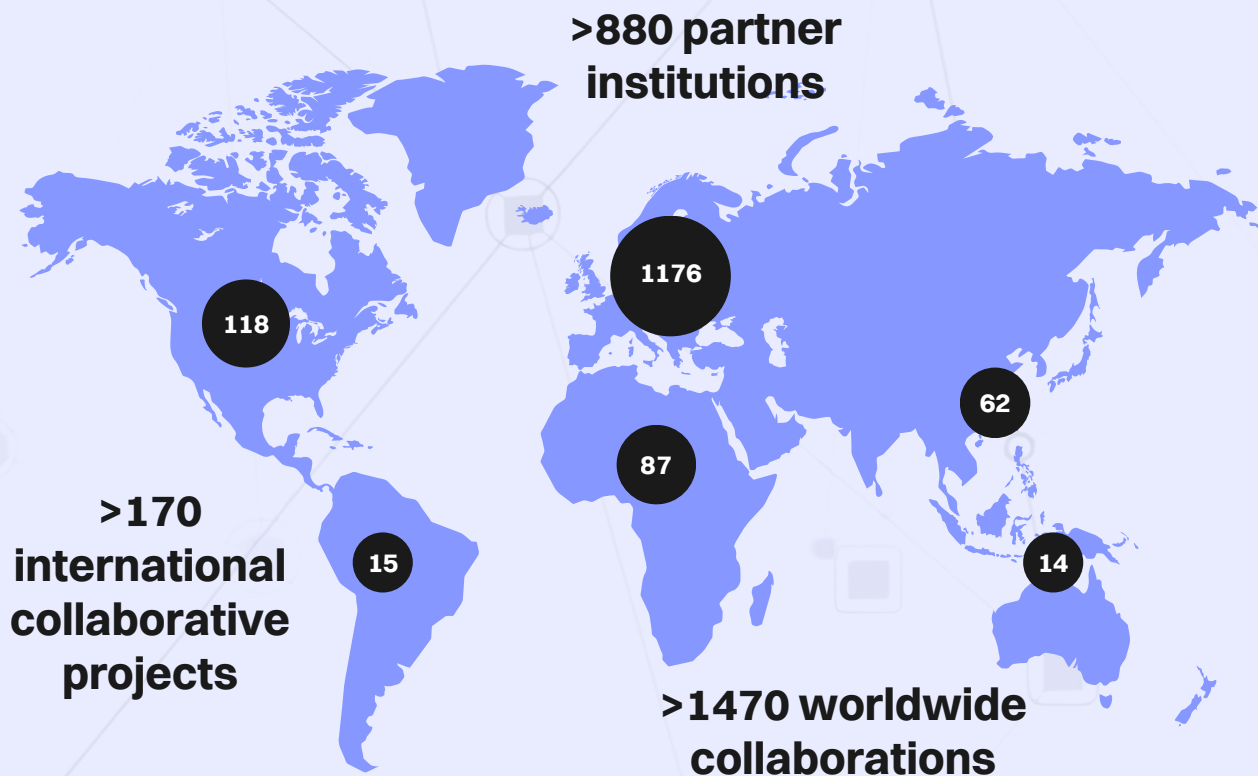
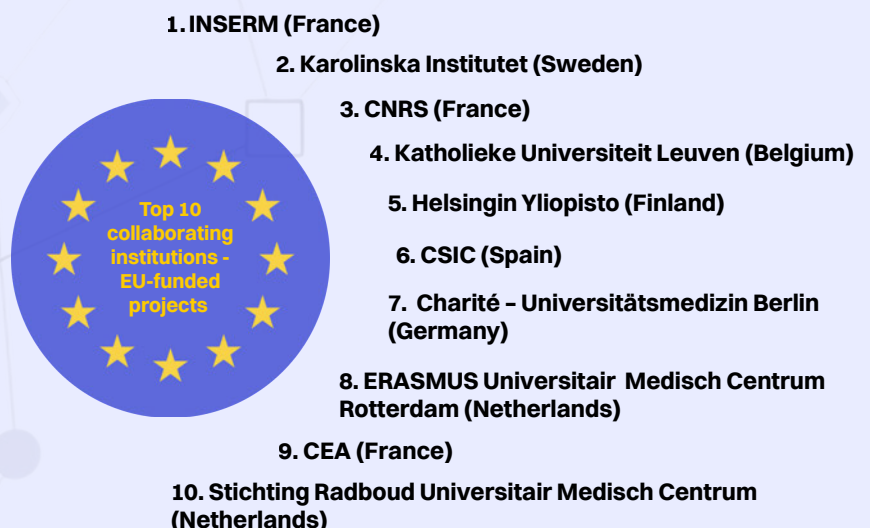


Figure 12: Collaborations with international partners funded by the EU, national (ANR, ANRS) and international funders (NIH, Gates Foundation, Wellcome, etc.) Projects with start dates from 2019-2024 were included. If an institute collaborates in 10 different projects, it is counted 10 times. One project can have multiple collaborations.

The European Union (EU) is Institut Pasteur's primary source of international research funding. Institut Pasteur participated in **80 collaborative EU-funded projects that started between 2019 and 2024**, involving 720 partner institutions worldwide, excluding those from France.

Unsurprisingly, **collaborations with the 27 EU member states dominated** (70% of all collaborations). The leading collaborating country in EU projects is **France** (180 collaborations), followed by **Germany** (177), the **Netherlands** (114), **Spain** (101), **Italy** (93) and **Belgium** (80).

Top non-EU partners were from European countries outside of the EU (182 collaborations), Africa (43 collaborations) and the Americas (32 collaborations).





The Pasteur Network: mobilised in collaborative grants

40 projects
included
17 members
of the Pasteur Network

These 40 projects represented 26% of all of Institut Pasteur (Paris)' international collaborative grant-funded projects.

19 were funded by the European Union. Notable examples include the **PvSTATEM** and **DURABLE** projects. Institut Pasteur was also partner on the Institut Pasteur de Tunis-coordinated **VISION** project.

12 were funded by international funders, such as the NIH-funded **PICREID** project and the Gates Foundation-funded **CIRCE-Afro** project.

At the national level, **ANRS Maladies Infectieuses Emergentes (ANRS-MIE) and its Emergence PRFI (LMICs) programme provide a key funding mechanism** supporting research involving the Pasteur Network. This uniquely allows funding of foreign institutions—a rarity among national funders.

Between 2019 and 2024, 3 projects were funded under the Emergence PRFI programme, **2 of which involved other members of the Pasteur Network**: a project on **plague** with Institut Pasteur de Madagascar (coordinated by Dr. Olivier Dussurget, Institut Pasteur) and an Institut Pasteur du Cambodge- coordinated project on **dengue** (with Dr. Richard Paul at Institut Pasteur).

The **ANR AAPG** and **France 2030 programmes** have also supported collaborations with the Pasteur Network; 7 such projects were funded. One example is the **AMAZED project coordinated by Institut Pasteur de Guyane**, with Institut Pasteur (Paris), Institut Pasteur Nouvelle-Calédonie and Institut Pasteur de la Guadeloupe as partners. This project studies arbovirus emergence mechanisms through a One Health approach in multiple overseas and continental territories, assessing anthropogenic impacts like climate change and habitat alteration to inform prevention strategies.

Institut Pasteur de Dakar emerged as the top collaborating institute of the Pasteur Network, working on 10 projects with Institut Pasteur (Paris), followed by Institut Pasteur du Cambodge and Institut Pasteur de Madagascar (6 each).



Major Institut Pasteur-led research projects with members of the PN



Funded by the Gates Foundation and coordinated by Dr. Maël Bessaud, the **CIRCE-Afro** project (2024-2027) aims to better understand how certain non-polio enterovirus C (EV-C) strains circulate in various regions of Africa and sometimes recombine with polioviruses, with the ultimate goal of reducing the risk of polio vaccine viruses revert into pathogenic forms. Institut Pasteur d'Algérie, Institut Pasteur de Guinée, Centre Pasteur du Cameroun, Institut Pasteur de Madagascar & Institut Pasteur de Bangui collaborate on this project.



Coordinated by Institut Pasteur (Paris) by Dr. Michael White, the EU-funded **PvSTATEM** project (2022-2027) targets the control and elimination of *P. vivax* malaria in Ethiopia and Madagascar.

The initiative integrates advanced serological testing, targeted treatments, mobile technology, and machine learning. Two Pasteur Network members collaborate on this project, Institut Pasteur de Madagascar and Institut Pasteur (Paris), among other partners.



Supported by the NIH, the **PICREID** project (2020-2025) led by Prof. Anavaj Sakuntabhai and Dr. Etienne Simon-Lorière addressed emerging infectious diseases through a One Health approach, focusing on dengue virus, CCHFV, RVFV and Disease X.

This expansive international consortium strengthened capabilities for outbreak response, surveillance, and zoonotic virus research. 3 Pasteur Network members collaborate in this project: Institut Pasteur du Cambodge, Institut Pasteur de Dakar and Centre Pasteur du Cameroun, as well as the Pasteur Network Association in Paris.



Funded by HERA under the EU4Health program and coordinated by Dr. Jean-Claude Manuguerra and Dr. Roberto Bruzzone, **DURABLE** (2023-2027) aims to build a sustainable EU network of biomedical and public health laboratories enhancing preparedness and response to emerging infectious diseases.

The Pasteur Network Association in Paris spearheads the training pillar, delivering courses, webinars, and fellowship programmes to strengthen outbreak preparedness and research skills across partners.



Funding essential equipment

State-of-the-art infrastructure and equipment, both large items in the core facilities and smaller pieces of equipment used in labs across the campus, are essential for advancing scientific excellence, enabling innovative experiments and maintaining a competitive edge at the international level. Grant funding is a major driver in providing these vital resources at Institut Pasteur.

Grant-funded equipment: scale and sources

>18.7M€

in research equipment was funded by grants between 2019 and 2024

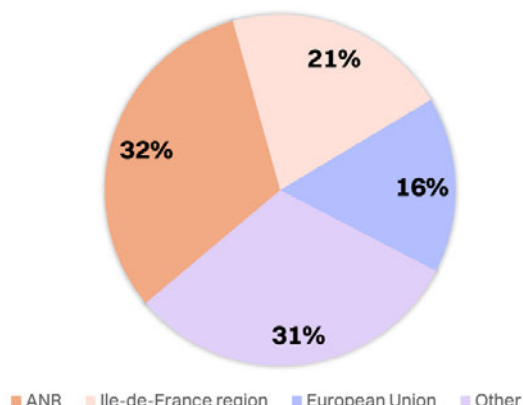


Figure 13: Equipment expenses that were covered by different funders, 2019-2024

These funds covered annual investments ranging from 2.1 to 4.4 M€. More than 80% of this support came from major funders: ANR (notably through strategic LabEx programmes focused on scientific excellence), Région Ile-de-France (SESAME and Domaine d'Intérêt Majeur (DIM) programs) and the European Union.

Almost half of grant-funded investments were for high-value items (>100 K€) — including confocal, light sheet and electron microscopes, GMP cell manufacturing systems, cell sorters, advanced sequencing platforms, and computational servers. These acquisitions are vital for cutting-edge research in genomics, cell biology, imaging and bioinformatics. Grants also financed other essential equipment, such as isolators, centrifuges, autoclaves, incubators, and qPCR systems.

In the period 2019-2024, grants covered in total 25% of all equipment costs (17%-32% per year), while the rest was covered by Institut Pasteur's own funds (62%) or external funding not handled by the Grants Office but rather by the DARRI, DIRPHI or other services (13%).

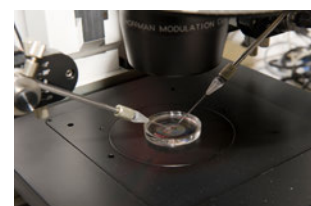
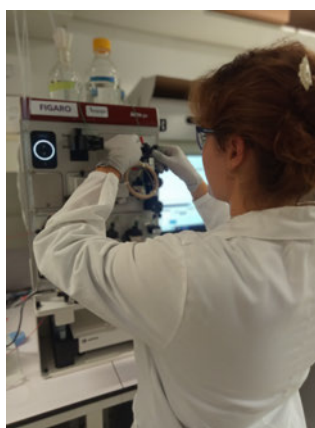


Strategic National and Regional Programmes



Beyond core funders, key strategic initiatives boost equipment acquisition and research capacity. The **SESAME programme**, co-funded by Bpi France and Région Ile-de-France, supports the development of scientific and technological platforms with up to 2.5 M€ grants, targeting the structuring of economic sectors and competitiveness within Ile-de-France. Between 2019 and 2024, one such project was funded for a total of 1.2 M€.

Institut Pasteur has also led several large projects funded through **Domaines d'Intérêt Majeur (DIMs)**, regional and national priority research domains aimed at fostering collaboration, technology development, and innovation. Finally, the **Laboratories of Excellence (LabEx)** programme released in 2011 provided substantial funding for equipment, in particular IBEID, Revive and Milieu Interieur.



Left: PhD student Victoria Taylor Monnot of the Structural Virology Unit using the AKTA system, purchased with NIH funds in 2021. This equipment provides an important service for purifying antigens and antigen/antibody complexes and for processing cryo-electron microscopy (EM) data.

Role of the IDF Major R&I Domains (DIMs)

The DIMs awarded nearly 4 M€ in 21 equipment projects from 2019 to 2024. Contributing DIM programmes included [ELICIT](#), [One Health](#), [Thérapie Génique](#), [C-Brains](#), and [BioConvS](#), which funded equipment from advanced microscopy systems (STED, confocal, super-resolution) and mass spectrometers to spectral cytometry, digital pathology scanners, and automated pathogen engineering platforms. This sustained regional support has equipped laboratories with state-of-the-art instruments.



Attracting and cultivating talent

Grants play a crucial role in supporting the careers of researchers, especially early-career scientists, by funding key positions that enable their professional development.

Fixed-Term Contracts (CDDs)

Between 2019 and 2024, grants funded a yearly average of 371 full-time equivalent (FTE) CDDs (Figure 14) - roughly:

6 out of 10 CDDs.

This includes an average of **107 full-time PhD candidates** and **213 full-time postdoctoral fellows** funded yearly by grants.

National funders provided the bulk of CDD funding; ANR was the principal contributor, followed by FRM and ANRS-MIE. The European Union funded 18% of CDDs during this period, while the NIH funded only 2%.

In 2019, the top 5 funders together made up approximately 85% of all grant-funded CDD FTEs. By 2024, they represented almost 91%. This means that CDD funding is increasingly dependent on just a few funders, in particular the ANR.

Permanent Contracts (CDIs)

Grants rarely fund permanent positions, but their role is growing: from 2019-2024, only a yearly average of 30 out of 1571 CDI FTEs were grant-funded (about 2% - Figure 14). However, this number has been increasing, **from 24 in 2019 to 46 in 2024**, reflecting changes in internal policies to allocate more permanent positions to grant budgets when eligible, as well as the introduction of "CDI Project" contracts (an average of 17 per year since 2022). The EU was the top funder of CDI FTEs (yearly average of 15), followed by the ANR (average of 11).



Figure 14: Proportion of Full-time Equivalents funded by grants, 2019-2024

From 2019-2024, grants funded **total salary costs** in the amount of

139.5 M€

an average of:

23.3 M€/year

Career trajectories

Grants can have a significant impact on researchers' career trajectories, by offering **time** to develop a research focus and **opportunities** that they might not otherwise have had.



Almost all PIs responding to a Grants Office survey reported that their grant(s) contributed positively to scientific performance evaluations.

Many PIs gained **access to new research positions, advanced career steps, or involvement in strategic decision-making bodies.** Additional benefits included **expanded teaching opportunities** and **increased recognition for innovation.** Notably, not a single PI reported any negative career impacts linked to grant funding.

"The MSCA fellowship has advanced my career in several ways. Preparing the application with guidance from the Grants Office was a valuable experience that I believe strengthened my CR application. Receiving the fellowship reinforced my intellectual independence and established my financial autonomy; for example, the fellowship has supported my participation in multiple international conferences, building my professional network. Importantly, the fellowship also provided a secure two-year period during which I was able to develop my CR project proposal, UniGEM."



Dr. Aimee Taylor, former MSCA postdoctoral fellow, now Chargée de recherche (CR) on Dr. Michael White's team



Dr. Etienne Simon-Lorière, Head of the Evolutionary Genomics of RNA Viruses Unit

"My former G5 was created in part thanks to the support of the INCEPTION programme (at 35%, the rest by Institut Pasteur). During that time, I was lucky to benefit from the ANR JCJC scheme, and to contribute to several EU projects. Finally, I had the opportunity to co-coordinate the large NIH PICREID project, which was a major learning experience."



Dr. Aleksandra Deczkowska, Head of the Brain-Immune Communication Unit

"My lab strives to understand the fundamental pathways of immune-to-brain communication in development, aging, health, and disease so that in the future, the human immune system could help cure brain diseases. ERC is a central funding source for this project."



Diversity matters: gender balance in research teams

We crossed data from Grant Manager with the data on gender balance among scientists from the yearly Social Reports ("Bilan Social"). On average, over the 6 years, **women represented 48% of the researchers** (2020 was the lowest percentage at 47%, while 2024 was the highest at nearly 50% (49.6%). However, the gender imbalance was greater among heads of units: on average 73% male and 27% female over the last six years. This could have impacted submission and funding rates as heads of unit typically submit more proposals than other scientists.

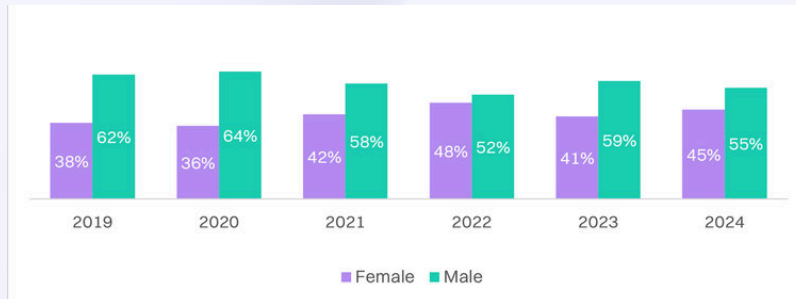


Figure 15: Submissions by male and female researchers (2019-2024)

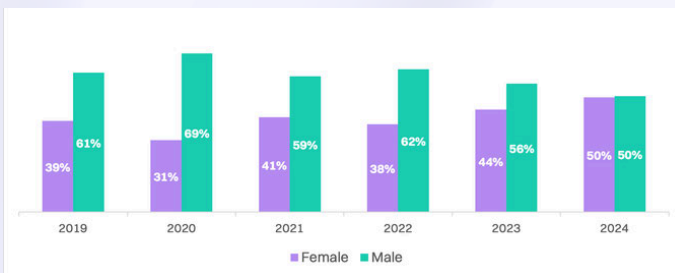


Figure 16: Funded projects by gender (projects with a start date in 2019-2024).

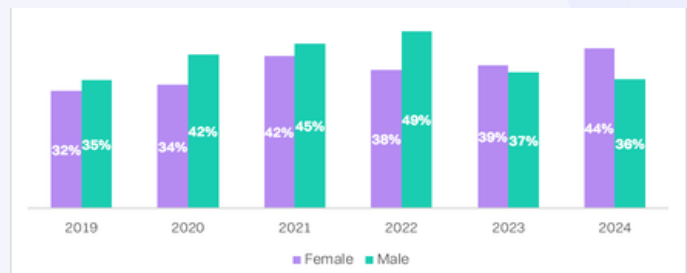


Figure 17: Success rate by gender (results of call editions from 2019-2024).

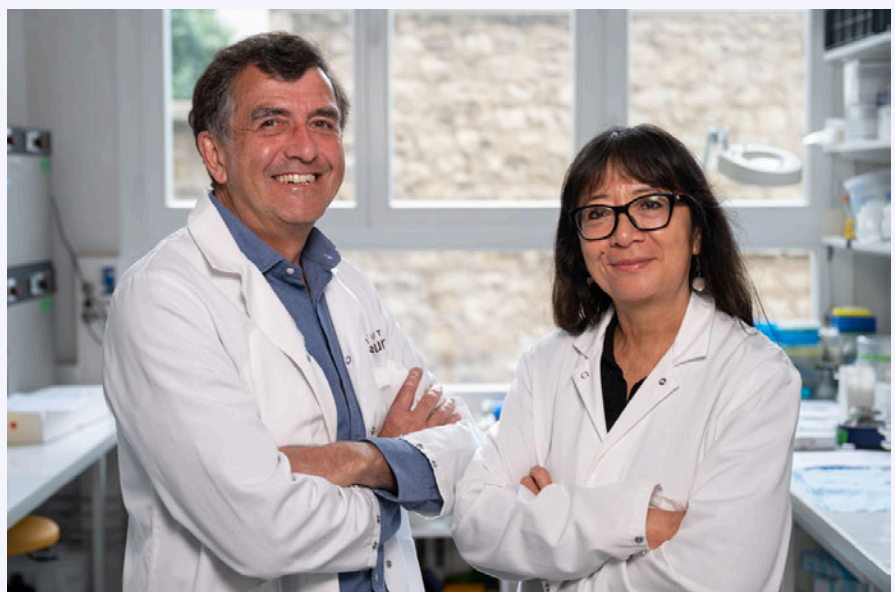
Female scientists consistently submitted fewer grant proposals than their male counterparts over all years. A small dip in submissions was observed in 2020 compared to 2019 (-2%), but this coincided with a lower percentage of female scientists in 2020 (-1% compared to 2019). **In 2022, submissions by female scientists reached a peak of 48%**, nearly matching the institutional gender balance that year.

A higher percentage of funded grants was led by male PIs; an average of 59% over the six-year period. This trend was the most pronounced in 2020 (Figure 16). One explanation could be the COVID-19 pandemic; male researchers led 44 of the COVID-19 funded projects in 2020 (versus 27 led by females).

The gender gap in terms of success rate is smaller. In fact, the trend inverted over the last two years (Figure 17); females had a higher success rate than males in 2023 (39% vs. 37%) and in 2024 (44% vs 36%).

2024 was a pivotal year for women at Institut Pasteur:

- parity was nearly reached in the workforce among scientists,
- an equal percentage of grants led by male and female scientists were funded
- females surpassed males in their grant success rate.



Pr. Arnaud Fontanet, Head of the Epidemiology of Emerging Diseases Unit and Pr. Anna-Bella Failloux, Head of the Arboviruses and Insect Vectors Unit (AIVA)
Credit: Alexandre Darmon / Art in Research



Beyond the projects: grants help shape policy

Grants extend their impact beyond scientific outputs, directly shaping policy frameworks, institutional governance, and the broader research culture at Institut Pasteur.

Grant-funded projects at Institut Pasteur can thus have an impact on policy at institutional, national and international levels. Notable examples include the Horizon 2020 [Sonar Global](#) project coordinated by Tamara Giles-Vernick, which had an impact on policy development in partner countries. Pablo Navarro-Gil's [BinD](#) project (ERC Consolidator grant 2017) contributed to the development of working groups supporting the Institut Pasteur Strategic Plan. Large-scale French projects like [INCEPTION](#) and [LabEx Milieu Intérieur](#) have driven discussions on improving data accessibility with funding agencies.



*"In the framework of this EU project, researchers conducted COVID-19 vulnerability studies in 5 European countries, as well as in Bangladesh and Uganda. All country teams developed and promulgated policy recommendations; in Italy, the team was able to translate these policy recommendations into policy measures that were implemented. In Paris, I would say that we had some influence on the conceptualisation of vulnerability in the creation of the new *"lutte contre l'exclusion"*."*



Dr. Tamara Giles-Vernick,
Head of Sonar Global

Beyond this direct scientific contribution, **policy impacts also arise more globally in response to funding requirements.** In some instances, a policy is developed specifically to comply with grant eligibility criteria. In others, its implementation is influenced and/or accelerated by such requirements. These efforts often drive internal reforms, enhancing the competitiveness of grants and fostering excellence. Moreover, European funding has driven institutionalisation of norms on open science and environmental sustainability, which are becoming standard.

Key policy areas influenced by grants' conditions:

- **Ethics and Research Integrity:** this encompasses Institut Pasteur [financial conflicts of interest policy](#) (2018), the Institut Pasteur [Charter for Research Integrity](#) (2024), and adherence to national and European codes, including FAIR data principles.
- **Human and Animal Research:** Compliance with mandatory training and regulations such as the U.S. Institutional Review Board (IRB), the [National charter on ethics of animal experimentation](#), and [EU Directive 2010/63/EU](#) ensures ethical standards across research activities.
- **Genetic Resources:** Compliance with the [Nagoya Protocol](#) governs use and sharing of genetic material.
- **Data Management and Protection:** Adherence to [GDPR](#), FAIR principles, and information security standards safeguard research data and participant privacy.
- **Human Resources:** Recognition such as the [HR Excellence in Research Award](#) (2021) and subsequent 2024-2026 HRS4R action plan, the development of Gender Equality Plans (an eligibility criterion in Horizon Europe since 2022) and transparent recruitment policies (OTM-R) reflect compliance with EU human resources standards.
- **Biosecurity and Safety:** Updates to BSL3 laboratory Standard Operating Procedures (SOPs) following CDC and NIH reviews enabled access to U.S. federal funding for work involving a [Select Agent](#) (highly pathogenic agent).
- **Risk Management:** Implementation of SOPs for assessing risk with collaborating institutions enhances research collaboration and intellectual property safeguards.
- **Sustainable Development Goals (SDGs):** EU funding often requires UN SDG alignment. Institut Pasteur [supports the UN Global Compact](#), which has many [linkages](#) with the SDGs.
- **Environment:** MSCA PF applicants must demonstrate compliance with the [MSCA Green Charter](#), translated internally through multiple actions for air, waste, water, etc. piloted by the DRSE.

INSTITUT PASTEUR



HR EXCELLENCE IN RESEARCH

Nagoya Protocol



Administrative burden

It is important to acknowledge that the **impacts are not exclusively positive.** Complying with the aforementioned policies can represent a significant administrative burden for both scientists and support service personnel. In some cases, this additional administrative burden may be excessive. For example, the process of obtaining NIH Select Agents approval for one project was long and intrusive, to the point that Institut Pasteur upper management decided that future NIH projects planning work with Select Agents must undergo more intense internal scrutiny and a cost-benefit analysis prior to submission.

METHODOLOGY AND LIMITATIONS



This section provides detailed methodological information for all analyses presented in this report, along with transparent acknowledgment of limitations and interpretive cautions. Each impact chapter employed distinct data sources and analytical approaches, which are described below.

Cross-cutting limitations

- This report covers only grants managed by the Grants Office and excludes those administered by DARRI, DAI, SPAIS and DIRPHI.
- Cross-chapter comparisons are not recommended unless specifically justified; each chapter employs distinct data sources and timeframes.
- Correlations between grants and outcomes (publications, patents, career success) do not establish causation due to selection effects - successful researchers both attract grants and produce excellent outcomes.
- Research impacts emerge over different timescales: publications (1-3 years), patents (2-5 years), start-ups (5-10+ years), making comprehensive attribution to specific grants difficult within our 2019-2024 window.
- The report focuses on quantifiable metrics, which are proxies for but not direct measures of scientific breakthrough significance, true innovation value, or research culture.
- This report should be read alongside scientific evaluations, technology transfer assessments, and qualitative case studies for complete impact assessment.



Submissions, funding & success rates

Methodology

Most of the data was extracted from GM, with some additional data from funder databases (i.e. EU, NIH). The analysis covers January 1, 2019 to December 31, 2024 and includes all projects managed by the Grants Office. A specificity of this report is that the data included only pertains to funds awarded directly to Institut Pasteur teams, not funds distributed further to partner institutions. Even for major collaborative projects coordinated by Institut Pasteur, we do not show the full amount awarded to the whole consortium. Submissions were tracked based on project creation year in GM. Award amounts are recorded in the contract signature year. For multi-year grants, the full amount is attributed to the initial contract year. This approach accurately reflects when funding was secured and allows consistent year-to-year comparison of competitive success.

Success rates were calculated by dividing funded projects by eligible evaluations, excluding PI-initiated withdrawals, ineligible applications and proposals still under evaluation at data cut-off.

Limitations

Data on 2019 submissions may be incomplete; GM was launched in 2018 and while most grants were tracked in GM by 2019, a few may have been missed.

The figures reflect a grants-based vision, tracking contracts and funds awarded, which differs from the Financial Department's fiscal-year accounting. For the fiscal perspective, see Annual Reports (2024 edition available [here](#)). Currency conversions used official SAP exchange rates when available, otherwise the rate on August 27, 2025.



Scientific excellence

Methodology

Publication data was provided by CeRIS, encompassing all Institut Pasteur publications from 2019-2024. We analysed funding acknowledgments, grants cited per publication, publication type, citation quartile ranking, and funders cited. We manually analysed funders of publications with first and/or corresponding authors from Institut Pasteur, as automatic inCites calculations depended on suboptimal coding of funders. A PI survey targeted 24 leaders of 28 major grants (primarily ERC and large collaborative projects) that concluded in 2019-2024. 18 PIs responded covering 20 grants (75% response rate), providing feedback on publication impacts, visibility, conference invitations, follow-on funding, and career effects.

Limitations

Given the volume (>7500 publications), we did not manually verify whether cited grants funded Institut Pasteur authors specifically or their co-authors from other institutions. Our analysis captures the funding ecosystem surrounding Institut Pasteur publications rather than precise attribution.

Publications reflect papers published 2019-2024, not necessarily those from grants ending during this period. Typical publication lag is one to three years. The survey sample of 28 grants, while achieving excellent response rate, is modest and may not represent all researchers' experiences. Survey data reflects perceived impacts rather than independently verified outcomes.



Innovation & technology transfer

Methodology

All data was provided by DARRI. Declarations of Invention (DI) filed in 2019-2024 were filtered to those resulting in patents, then analysed for funding sources reported. For start-ups, DARRI provided PI names and founding years; we contacted each PI for detailed information. Four of six founders responded. Licensing data cover licenses issued from the analysed patent applications only, excluding know-how or biological materials.

Limitations

Invention Declaration data is declarative and may be incomplete if researchers don't recall all contributing grants. Attribution is complex as inventions build on years of research from multiple sources. Small sample sizes (139 patents total, 34 citing grants, 9 licenses, 6 start-ups) limit statistical power. Patents filed 2019-2024 may arise from grants funded years earlier, while 2019-2024 grants may generate future patents. Four of six start-up founders responded, potentially introducing response bias.

METHODOLOGY & LIMITATIONS



International reach

Methodology

Collaboration data was extracted from Grant Manager (GM) for nationally and internationally-funded projects. For EU projects, we cross-validated GM data with the EU Horizon Dashboard. Fellowships and projects where Institut Pasteur was the sole beneficiary were excluded. Manual review determined collaborating institutions' countries. Data reflects consortia at GM file creation (usually pre-submission or post-award), not later changes. We also searched specifically for Pasteur Network member involvement across all funded projects.

We included collaborations from 6 continents on the map on page 14: North America, South America, Europe (including Russia), Africa, Asia (including Israel) & Oceania (including New Caledonia). Page 15: projects with exclusively Pasteur Network members other than Institut Pasteur Paris are out of scope.

Limitations

Consortia can evolve over time with partners added, removed, or roles adjusted. Resource constraints prevented systematic tracking of these changes. Data only reflects confirmed collaborations, meaning collaborations we were able to identify in official project documents. In some instances, particularly when Institut Pasteur is partner, we did not have access to the data for the entire consortium.

The PI survey provides qualitative insights but has a small sample (20 PIs responded, out of 24 solicited) and reflects coordinator perspectives, which may differ from partners' experiences.



Careers and human capital

Methodology

Data from the Human Resources and the Financial Departments (DRH/DF) details full-time equivalents (FTEs) by contract type (CDD, CDI) from 2019-2024. We excluded OREX positions, interns, professional training contracts, and students. We cross-validated data with the funders in the GO portfolio, including only personnel funded by GO-managed grants. Data reflects financial information (FTEs), not individual counts. For example, two individuals each 50% grant-funded appear as 1.0 FTE. Funding allocation follows institutional financial accounting rules managed by DF. Data on gender balance among heads of units was provided by the PACS.

The PIs contacted for the survey represented 28 Grants Office-selected, major collaborative projects funded by Horizon 2020, Gates, NIH, DARPA, Wellcome, WWC and HFSP.

Limitations

FTE data cannot reveal how many distinct individuals were supported, their career trajectories, retention rates, or long-term success. The PI survey captures experiences of successful grant holders but not their team members (PhDs, postdocs, engineers) who constitute the majority of grant-funded personnel. We cannot survey researchers who left academia entirely.

Gender balance: figures should be taken with caution; Grant Manager captures the data of the person submitting the request. If this is not the person leading the proposal, this will not be accurately reflected in the data (i.e. if a postdoc submits the Grant Manager request on behalf of a Head of Unit, the project falls under the postdoc).



Research infrastructure & equipment

Methodology

Data from the Financial Department covers equipment expenditures charged to grant accounts 2019-2024. The equipment definition changed mid-period: 2019-2022 included all expenditures >0 €, while from 2023 only purchases > 5000€ qualified. This means approximately 1.4 M€ (7.5% of total) from 2019-2022 would not qualify under the new definition. European Union grants cover only depreciation costs rather than full purchase prices, possibly understating EU contributions compared to other funders using full-cost accounting.

Limitations

Data reflects equipment purchased from 2019-2024, not necessarily equipment funded by grants that took place during this period. Equipment purchased may be for pre-2019 grants. The definition change complicates year-to-year comparisons. Data captures financial investment but not utilisation, number of benefiting teams, scientific outputs enabled, or return on investment.



Policy guidelines & recommendations

Methodology

We surveyed the 24 coordinators of 28 major collaborative projects (see "Careers" methodology above); 20 PIs responded (83% response rate). We conducted semi-structured interviews with project managers and support services staff. We reviewed internal policy documents, funder requirements, and institutional reports. Analysis involved qualitative coding of themes, timeline construction mapping policies to grant requirements, and assessment of attribution.

Limitations

Most policies arose from multiple drivers including legal requirements, funder mandates, sector norms, and institutional values. We do not claim grant requirements were exclusive drivers. Administrative burden is discussed but not systematically quantified in terms of hours, opportunity costs, or psychological impacts.

DISCUSSION



This first Grants Impact Report confirms that **competitive grants are now structurally embedded** in Institut Pasteur's scientific activity, recruitment capacity and international profile. They support a large share of our publications, people, equipment and collaborations. At the same time, the analysis reveals several strategic vulnerabilities that require active management.

Grants clearly **drive scientific excellence and innovation**, but on different scales. Thousands of publications acknowledge competitive funding, reflecting the central role of grants in enabling high-impact research. By contrast, the number of patent applications that cite grant funding is much smaller; among the ~140 patent applications filed between 2019 and 2024, roughly one in four explicitly cites grants. To a certain extent this can be expected, given that most research conducted at Institut Pasteur is fundamental in nature and does not immediately translate into protectable inventions. **It is also possible that the data underestimates reality**: many inventions arise from years of cumulative, grant-funded studies, and research teams may overlook all relevant funding when filing declarations of invention. The figures presented here could therefore be interpreted as a conservative lower bound of the contribution of grants to Institut Pasteur's innovation pipeline.

At the **human capital level**, grants are pivotal. They finance a substantial proportion of doctoral and postdoctoral positions, thereby attracting and retaining talent and helping early-career scientists progress towards independence and leadership. Responses to the PI survey consistently report that major grants have strengthened scientific evaluations, visibility and access to strategic responsibilities.

Grants have also consolidated **Institut Pasteur's international position**, particularly through EU projects and collaborations within the Pasteur Network. These partnerships enhance our scientific reach and our contribution to global health challenges, from emerging infections to pandemic preparedness. Our analyses revealed strong collaborations, particularly within Europe, North America, Africa and, to a lesser degree, Asia. Few collaborations took place with South America and Oceania, which reveals an opportunity for lobbying efforts for funding programmes open to Pasteurian teams working with these regions.

However, we identify several challenges in this report. First, it shows a **high concentration of financial support in a small number of funders**, especially ANR. This reflects our strong competitiveness in ANR calls, but creates exposure to national policy and budget shifts. At the time of writing, these risks are being felt internationally by the recent NIH crisis, which will be addressed in our next report.

Another structural challenge concerns **indirect costs (IDC)**. Heterogeneous and often low IDC rates across funders and topics, particularly for strategic disease areas such as cancer, HIV, neurological disorders and rare diseases, generate structural gaps in financing core services and infrastructure. The institute currently mitigates these gaps through a mix of high- and low-IDC projects, the use of internal reserves and ongoing dialogue with funders. **Long-term institutional sustainability** will depend on 1) maintaining sufficient funding for strategic research projects as well as the fellowships that attract talent, 2) diversifying our portfolio towards funders with fair IDC policies and 3) developing philanthropic partnerships that explicitly support overheads.

Funder requirements have driven significant progress in **research integrity, ethics, data management, biosecurity, HR and open science**. These developments strengthen the quality and credibility of our research worldwide, even if they also contribute sometimes to a **growing administrative burden** for scientists and support services.

We are aware that this report itself has **limitations**. Some **variability remains in funder accounting methods, evolving financial rules and data granularity**, and **certain indicators cannot yet be extracted automatically** from Grant Manager. Examples include data on PI profiles (years after thesis, research field), detailed consortia composition (there is no exhaustive list of collaborators in Grant Manager; for some funders such as international ones, manual analysis of proposals and funding contracts was required). These constraints do not undermine the main findings but underline the need to continue **improving Grant Manager and interfacing it with other institutional databases**, ultimately strengthening Institut Pasteur's capacity to assess and demonstrate the impact of its research funding.

Looking ahead, this report establishes a **reproducible baseline for annual impact reporting within our institution**. Working closely with researchers, the Grants Office will use these findings to refine and diversify our funding strategy—particularly by strengthening our presence with other national funders and expanding towards international foundations (such as the Novo Nordisk Foundation and others)—to help secure a more balanced portfolio, support scientists more effectively and contribute to the successful implementation of Pasteur 2030.

GLOSSARY



- **AAPG** (Appel à Projets Générique) — The ANR's generic call for proposals, its primary competitive funding mechanism with an annual cycle.
- **ANR** (Agence Nationale de la Recherche) — France's national research funding agency, Institut Pasteur's largest funder.
- **ANRS-MIE** (Agence Nationale de Recherches sur le Sida et les Maladies Infectieuses Émergentes) — French agency funding HIV/AIDS, hepatitis, tuberculosis and emerging infectious disease research; allows foreign institution funding uniquely among national funders.
- **ARC** (Fondation pour la Recherche sur le Cancer) — French cancer research foundation providing fellowships and project grants.
- **BSL-3** (Biosafety Level 3) — Laboratory safety designation for work with agents causing serious human disease; requires specialised facilities and procedures.
- **Bpifrance** (Banque Publique d'Investissement) — French public investment bank supporting innovation and business development.
- **CARE** — The Career Development Service for Scientists at Institut Pasteur.
- **CDD** (Contrat à Durée Déterminée) — Fixed-term employment contract
- **CDI** (Contrat à Durée Indéterminée) — Permanent employment contract
- **CEA** (Commissariat à l'Énergie Atomique et aux Énergies Alternatives) — French research organization in energy, defense, and technologies.
- **CeRIS** — Institut Pasteur's scientific information resource center managing publications and bibliometric data.
- **CNRS** (Centre National de la Recherche Scientifique) — France's largest governmental research organisation.
- **CoARA** (Coalition for Advancing Research Assessment) — International agreement promoting responsible research evaluation beyond impact factors.
- **Collaborative project** — Multi-partner grant where Institut Pasteur works with other institutions; funding may be distributed among partners.
- **Convergence Institutes** — PIA program supporting interdisciplinary research centers; Institut Pasteur coordinates INCEPTION (2017-2026).
- **CSIC** (Consejo Superior de Investigaciones Científicas) — Spain's national research council.
- **DRH** — Department of Human Resources
- **DARRI** — Department managing technology transfer, patents, and industrial partnerships.
- **DAI** (Direction des Affaires Internationales) — Department responsible for developing and promoting Institut Pasteur's international activities, within Pasteur Network and beyond.
- **DARPA** — Defense Advanced Research Projects Agency
- **DF** (Direction Financière) — Department responsible for the financial management of the institute.
- **DIM** (Domaine d'Intérêt Majeur) — Île-de-France region's priority research domains supporting collaboration and innovation.
- **DORA** — International initiative reducing reliance on journal impact factors for research evaluation.
- **DTPS** — Institut Pasteur department of transformation and strategic programmes; sponsored this impact report.
- **EDCTP** - European & Developing Countries Clinical Trials Partnership.
- **ERC** (European Research Council) — EU's premier funding body for investigator-driven frontier research based on scientific excellence.
- **EU4Health** — European Union health programme (2021-2027) addressing health threats and strengthening health systems.
- **FAIR principles** — Standards ensuring research data is Findable, Accessible, Interoperable, and Reusable.
- **France 2030** — National investment plan (formerly France Relance) continuing PIA programs with increased budget from 2021.
- **FRM** (Fondation pour la Recherche Médicale) — Major French medical research charity; key fellowship funder
- **FTE** (Full-Time Equivalent) — Standardised measure of employment; one FTE equals one full-time position.
- **Gates Foundation** — Private funder supporting global health, vaccine and disease research.
- **GDPR** (General Data Protection Regulation) — EU regulation on data protection and privacy.
- **GO** (Grants Office) — Institut Pasteur's centralised grant management department.
- **GM** (Grant Manager) — Operational database system tracking all proposals, awards, and project data since 2018.
- **H2020** (Horizon 2020) — EU research and innovation program (2014-2020), predecessor to Horizon Europe.
- **HERA** (Health Emergency Preparedness and Response Authority) — EU authority for medical countermeasures against health threats.
- **HFSP** (Human Frontier Science Program) — Funder promoting international collaboration in basic research. Funds fellowships and research grants.
- **Horizon Europe** — Current EU research and innovation framework programme (2021-2027).
- **HR Excellence in Research Award** — EU recognition for institutions implementing good HR practices; awarded to Institut Pasteur in 2021.
- **IDC** (Indirect Costs) — Overhead expenses (infrastructure, administration, etc) not directly attributable to specific projects; also called "frais de gestion".
- **IHU** (Institut Hospitalo-Universitaire) — Hospital-University Institutes; excellence centers combining care, research, and training.
- **IMI/IHI** (Innovative Medicines/Health Initiative) — Europe's largest public-private partnership in life sciences (IMI under H2020 / IHI under Horizon Europe).
- **INCa** (Institut National du Cancer) — French national cancer institute.
- **INCEPTION** — Institut Pasteur's Convergence Institute for emergence of pathologies through individuals and populations.
- **INFRA** — EU program funding research infrastructures and facilities.
- **INSERM** (Institut National de la Santé et de la Recherche Médicale) — French national institute for health and medical research.
- **IP** (Institut Pasteur) — When followed by location (e.g., IP Dakar), refers to Pasteur Network member institutes.
- **IRB** (Institutional Review Board) — Ethics committee reviewing human subjects research.
- **LabEx** (Laboratoire d'Excellence) — Programmes funded through PIA/France 2030 supporting scientific excellence (ex: IBEID, Milieu Intérieur, Revive).
- **LNCC** (Ligue Nationale Contre le Cancer) — French national cancer league funding research and patient support.
- **MSCA** (Marie Skłodowska-Curie Actions) — EU program supporting researcher mobility and training; includes postdoctoral fellowships.
- **Nagoya Protocol** — International agreement on access and benefit-sharing of genetic resources.
- **NIH** (National Institutes of Health) — United States' medical research agency; world's largest public biomedical research funder.
- **OREX** (Organisme Externe) — External organisations' employees (ex: INSERM, CNRS) conducting research at Institut Pasteur.
- **Pasteur Network** — Global network of 32 members across 5 continents sharing Pasteurian values and collaborating on health challenges.
- **PEPR** (Programme et Équipements Prioritaires de Recherche) — Priority research programmes under France 2030 targeting strategic areas.
- **PI** (Principal Investigator) — Lead scientist responsible for grant proposal, execution, and reporting.
- **PIA** (Programme d'Investissements d'Avenir) — Investments for the Future programme launched in 2010; now France 2030.
- **PN** (Pasteur Network) — alliance of 32 institutes spanning 25 countries across 5 continents, fostering a dynamic and diverse community of knowledge and expertise, for which Institut Pasteur Paris is a member
- **PPR** (Programme Prioritaire de Recherche) — Priority Research Programme; includes specific calls like PPR AMR (antimicrobial resistance).
- **Préciput** — Additional institutional overhead payment from ANR delivered one year after contract signature.
- **PRCI** (Projet de Recherche Collaborative International) — ANR's bilateral collaborative research project scheme.
- **PRFI** (Pays à Revenu Faible et Intermédiaire) — Low and Middle Income countries (LMIC)
- **PTR** (Programme Transversal de Recherche) — Institut Pasteur's internal transverse research programmes.
- **RHU** (Recherche Hospitalo-Universitaire) — Hospital-University research projects linking clinical and academic research.
- **SAP** — Enterprise resource planning software used for Institut Pasteur financial management.
- **SPAIS** (Service de la Programmation et des Actions Incitatives Scientifiques) — department that manages internal calls at Institut Pasteur
- **Select Agents** — Highly pathogenic biological agents regulated by U.S. CDC and USDA; special approval required for NIH funding.
- **SESAME** — Île-de-France programme supporting major scientific equipment and platforms (up to 2.5 M€).
- **Success rate** — Percentage of evaluated proposals receiving funding; calculated excluding withdrawn/ineligible applications.
- **Wellcome** — UK-based global charitable foundation funding health research.
- **WWCR** — Worldwide Cancer Research

The Grants Office is a team of specialists dedicated to helping Pasteurians achieve success with their grants.

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[GO Website](#)