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EMERGING INFECTIOUS DISEASES Inserm

Activity Report 2024

In France and Europe, ANRS MIE supports research against emerging infectious diseases

In a world marked by recurrent health crises, growing geopolitical tensions and the impacts of climate change, research into infectious diseases must be cross-cutting and collaborative. An autonomous agency of Inserm, ANRS Emerging infectious diseases facilitates, coordinates, evaluates and funds research into HIV/AIDS, viral hepatitis, sexually transmitted infections, tuberculosis and emerging and re-emerging infectious diseases such as viral respiratory infections, viral haemorrhagic fevers and arboviral diseases, structured around a One Health approach.

All areas of research are there: basic, translational, clinical, public health and the human and social sciences. Supervised by France's Ministries of Research and Health, ANRS MIE federates an inter-institutional network of national and international doctors and researchers, patient organizations and representatives of civil society, fully integrated into its governance and operations.

Through its One Health approach, ANRS MIE focuses on the links between human health, animal health and the environment, thereby reinforcing the preparedness of France's response in the event of crisis. The agency is part of an international effort to combat epidemics, particularly in close collaboration with Europe and a network of partners from the Global South where the exposure to epidemic threats is particularly high.

In this case, the year 2024 was marked by ANRS MIE amplifying its activities at the European and international levels. It is a key institution in the fight against endemic and emerging infectious diseases in France and Europe, particularly through its coordination of the BE READY European partnership on emerging infectious diseases.

It supports and funds international projects, which represent one quarter of its funding. International cooperation is indeed essential when it comes to preparing for and preventing epidemics, as well as detecting, controlling and dealing with them when they arise.

While climate change is becoming a threat to the future of humanity, the geopolitical situation has also become tense on many continents, with the USA reducing its funding to the international research community, particularly the Global South, or in areas such as emerging infectious diseases. This unprecedented context therefore reminds us of the extent to which the place and role of France and Europe must be strengthened, and that it is urgent to foster the coordination and facilitation of cross-cutting, collaborative and multidisciplinary research, not only into emerging infectious diseases, but also existing epidemics such as HIV, tuberculosis and hepatitis. These are all challenges that will continue to be addressed in 2025 with the objective of extending the agency's remit to include another silent epidemic: antimicrobial resistance.

The previous year saw the launch of major studies in basic research, clinical research and public health, the structuring of new working groups, coordinated actions and the organisation of several international conferences, confirming the relevance of the ANRS MIE model of action and the importance of the coordination it carries out.

Whether international or national, scientific and medical cooperation is more essential than ever if we are to address the health challenges facing the world.
Only that will save lives.

Through its One Health approach, ANRS MIE focuses on the links between human health, animal health and the environment, thereby reinforcing the preparedness of France's response in the event of crisis.

Yazdan Yazdanpanah, Director

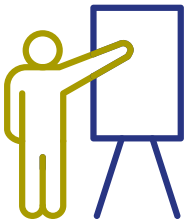
Isabelle Richard, Chair of the Advisory Board

University professor and hospital practitioner since 2006, Yazdan Yazdanpanah is an internationally-renowned specialist in infectious diseases. Professor of medicine at Paris-Cité University and Head of the Infectious and Tropical Diseases Department at Bichat-Claude-Bernard Hospital (AP-HP) since 2012, he is also Director of the Inserm Immunology, Inflammation, Infectious Diseases and Microbiology Theme-Based Institute since 2017.

Key figures for 2024

Calls for proposals in 2024

155
new research projects and grants in 2024.



49.7 M€ **total budget allocated to the research projects** and grants resulting from the 2024.

Human resources

126 collaborators in 2024.

Responses to emergences

4 activations of level 1 Emergence units (H5N1, mpox, Oropouche, and chikungunya).

3 scientific watches conducted, disseminated and updated weekly or monthly.

9 scientific knowledge notes written and shared with institutions and partners.

357 research projects ongoing

138
clinical research projects sponsored in 2024 (pathophysiological studies, cohort studies or therapeutic trials including vaccines).

85
research projects in public health and the human and social sciences ongoing in 2024 (including 37 in low- and middle-income countries).

134
basic research projects ongoing in 2024.

Communication

16 500
LinkedIn subscribers
(as at 30 June 2025)

19 **Press releases**

6 **Press briefings**

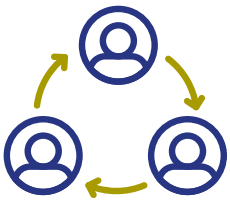
101 **New items** on the anrs.fr website

Scientific facilitation

24 **Scientific facilitation groups:**
Coordinated Actions, working groups and sub-groups, networks, task forces.

853 **People attended**
the ANRS MIE Scientific Days (21-22/03/2024)
400 people attended
453 numbers of unique views

21 **Symposia supported**
in 2024 as part of the Symposia and Publications call for proposals.



285
People attended
the Long Covid Day (14/10/2024)
114 people attended in total number of
171 unique views

197
People attended
an event to present the France 2030 – Emerging Infectious Diseases Strategy winners (30/09/2024).

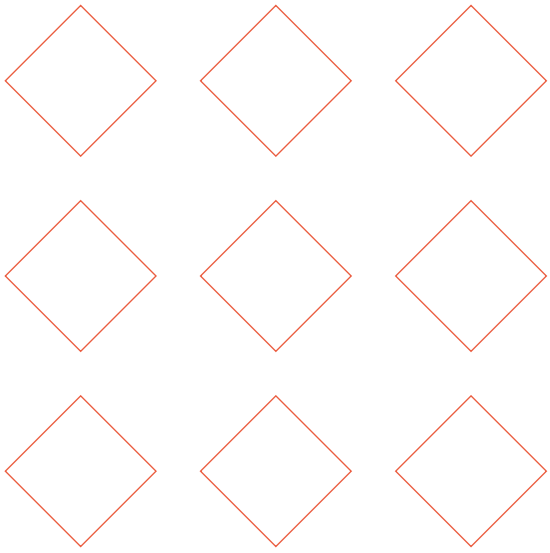
Part 1:

Coordinating research during epidemic periods

In France, as in Europe and beyond, ANRS Emerging Infectious Diseases plays a central accompanying role in preparing responses to future infectious threats. But not just that. It is also a key player, an inter-institutional leader and a research accelerator when an epidemic occurs. It can then trigger a process that includes scientific facilitation, scientific watch and funding for a rapid response, according to a multimodal system of multiple response levels that are scalable according to severity. In 2024, ANRS MIE mobilised in response to multiple epidemics: mpox, chikungunya, Oropouche and avian influenza A (H5N1).

Mpox: mobilising in response to an international public health emergency

Mpox is a virus endemic in Central and West Africa, particularly in the Democratic Republic of the Congo (DRC), affecting mainly remote and rural areas.
Since the start of 2023, the growing frequency of mpox outbreaks in African regions has become a major concern. An increase accompanied by a worrying expansion of the area of spread of the virus in Central Africa. At the end of 2023, ANRS MIE responded by activating a Level 1 (enhanced vigilance) Emergence Unit as part of its epidemic surveillance and response system, and funded the PANAFPOX2 research project in January 2024. Taking a One Health approach, this multidisciplinary project aims to study the genetic diversity of mpox circulating in the DRC and the predominant type of transmission.



In May 2024, the Global Health EDCTP 3 programme launched an emergency call for proposals, to which ANRS MIE contributed EUR 5 000 000. In August 2024, the World Health Organization (WHO) declared the mpox epidemic a Public Health Emergency of International Concern (PHEIC) for the second time.
ANRS MIE coordinated several expert meetings leading to the design and funding of four research projects, including a cohort in sub-Saharan Africa – the epicentre of the epidemic. Finally, on 9 – 13 December 2024, the PRISME RDC Platform held an advanced regional training course on mpox in Kinshasa, aimed at providing public health and research stakeholders with the knowledge and skills needed to manage the health crisis linked to this virus more effectively.

↘ Dealing with a new chikungunya epidemic on Reunion Island

Chikungunya is an infectious disease caused by an arbovirus (virus transmitted to humans or other vertebrates by certain types of haematophagous arthropods such as mosquitoes) of the same name. Between 2005 and 2006, Reunion Island faced a major epidemic, with over 266 000 symptomatic cases estimated – 34% of the island's population, and 258 deaths. The end of the epidemic was officially declared in April 2007.

A further increase in cases was observed from August 2024 and the epidemic declared on 13 January 2025. While the Regional Health Agency (ARS) of Reunion Island activated epidemic level 3 of the ORSEC arboviruses plan and the French National Authority for Health (HAS) published its recommendations, ANRS MIE activated a level 1 (enhanced vigilance) Emergence Unit in early 2025 with a monthly scientific watch (*N.B. research projects were funded and set up in 2025*). The research programme set up around the REVE-CHIK project, funded through the French Ministry of Health's ReCH-MIE programme, has led to a more rapid identification of the side effects associated with one of the chikungunya vaccines in people over 65.

https://anrs.fr/fr/cellules-emergences/

Working with the WHO to draw up a research and innovation roadmap against filoviruses

The Collaborative Open Research Consortia (CORCs) are an innovative initiative of the World Health Organization (WHO) aimed at strengthening research and preparedness for epidemics and pandemics. Eight CORCs have been set up, each coordinated by a collaborator from the World Health Organization (WHO) according to an agreed approach and shared objectives. It focuses on a specific family of pathogens of pandemic potential, which includes 11 viral families and five key bacteria. ANRS MIE has been appointed to coordinate the CORC dedicated to filoviruses – especially Ebola and Marburg. In collaboration with the WHO and other international partners, ANRS MIE is therefore responsible for conducting global consultations to develop and revise a roadmap to anticipate and respond quickly through research to emerging health threats related to filoviruses.

Monitoring and tracking progress in avian influenza A (H5N1) research

In April 2024, the first transmission of avian influenza A (H5N1) virus from a bovine mammal to humans was observed in the USA. Following direct exposure to cows carrying the virus, three dairy farm workers developed eye and respiratory symptoms, albeit with no serious complications. Infection with this virus is exceptional in bovines and, until now, reported human cases of infection worldwide had remained limited to close contact with infected birds.

In June 2024, as part of its Emergence programme, ANRS MIE opened a Level 1 (enhanced vigilance) unit to conduct a monthly scientific watch of avian influenza A (H5N1) in order to track research progress, but also the revision and co-funding of a research project by PEPR MIE and PREZODE – Priority Research Programmes and Equipment that form part of the Emerging Infectious Diseases and Nuclear, Radiological, Biological and Chemical Threats France 2030 Investment Plan Acceleration Strategy. Called ZOOFLU, this project aims to study the emergence of IAHP H5N1 viruses where wild fauna, domestic animals and humans intersect, by examining the mechanisms promoting their transmission and their capacity to cross species barriers. On the initiative of ANRS MIE and the French Agency for

Food, Environmental and Occupational Health & Safety (ANSES), a multi-institutional consultation group of institutions and stakeholders such as *Santé publique France* (SpF), the French Committee for Monitoring and Anticipating Health Risks (COVARS), the Toulouse National Veterinary School, the Centre for International Cooperation in Agricultural Research for Development (CIRAD), Institut Pasteur, and the French National Research Institute for Sustainable Development (IRD), has also been set up to define research priorities in avian influenza A (H5N1).

↘ With HERA and CT-CM: Preparing the response to health crises in Europe

Created in the wake of the COVID-19 pandemic, the Health Emergency Preparedness and Response Authority (HERA) is a Directorate-General of the European Commission (in the same way as the Directorate-General for Research and Innovation or the Directorate-General for Health) that implements its policies on preparedness and response to health crises, and contributes to the resilience of health systems in Europe, through the collection of information and reinforcement of the necessary response capacities. Launched in 2024 by HERA and the Directorate-General for Research and Innovation, the aim of the Clinical Trial Coordination Mechanism (CT-CM) is to coordinate the funding of clinical trials in Europe, particularly around innovations in epidemic preparedness and response. The mission of this sub-group is to provide opinions on the prioritisation of research themes, particularly in clinical research (clinical trials or cohorts) and its funding, in the event of a public health threat at European Union level. The French representative within the CT-CM, appointed by the Directorate-General for Health, is Yazdan Yazdanpanah, the Director of ANRS MIE. This strategic position enables the agency to strengthen France's position within the European institutional landscape, particularly in emergency situations. In March 2025, the CT-CM's work on the 2024 mpox epidemic contributed, for example, to the development of a EUR 4.9 million European call for proposals to support research into vaccines against this disease.

Part 2 :

Highlights of the agency's scientific activity

Under the supervision of the French Ministries of Research and Health, ANRS MIE brings together an inter-institutional network of national and international doctors and researchers, patient organisations and representatives of civil society, fully integrated into its governance and operations. This co-construction dynamic ensures that projects are implemented in line with the expectations of the communities concerned and aims to limit the health, economic and social impacts of epidemics. Join us for a look back at the highlights of 2024.

Major research programmes

BE READY: Creating a European research and innovation partnership for pandemic preparedness

The COVID-19 pandemic has emphasised the importance of planning and investment in research and innovation in infectious diseases with epidemic potential. The BE READY network – Building a European Strategic Research and innovation Area in Direct Synergy with other EU and International Initiatives for Pandemic Preparedness – is working to improve EU preparedness in predicting and responding to emerging health threats by improving how research and innovation funding is coordinated at European level. BE READY defines common objectives according to a joint strategic research and innovation agenda. The partnership brings together existing pandemic preparedness networks and works in synergy with the European Commission as well as various players in Europe and beyond. To build this ambitious partnership, BE READY (launched on 1 June 2022 for a three-year period) draws on the expertise of 26 public health organisations, ministries (of science, education, health, innovation and the environment) and research organisations from 16 countries to ensure a cross-cutting, interdisciplinary One Health and Global Health approach. ANRS MIE was firstly responsible for the general coordination of this preparatory phase of the partnership, notably with the definition of the strategic research and innovation agenda. In 2024, it was tasked

> ***'Our agency is tasked with supporting, coordinating and funding the national research community in the field of emerging infectious diseases. With its interdisciplinary research foundation and One Health approach, ANRS MIE has a unique capacity to contribute to preparedness and response to emerging infectious diseases. It is in this capacity that ANRS MIE is involved in BE READY as coordinator. This commitment constitutes a key element of our European and global strategy to promote coordination and limit the effects of emerging epidemic events.'***
>
> Professor Yazdan Yazdanpanah, Director of ANRS MIE

with its coordination and implementation (EUR 200 million budget), including future joint calls for proposals at European level and the creation of a research ecosystem ready for activation in the event of an epidemic (including a European network of clinical research sites). As part of this project and with the other institutions, the missions of ANRS MIE are to identify priority clinical research questions for a range of pathogens of concern, focusing on the research and development of vaccines and treatments; propose objective criteria to help the Member States and European Commission decide when to fund emergency clinical research; and to facilitate coordination in the event of emergence.

↘ The Emerging Infectious Diseases Priority Research Programme and Equipment (PEPR MIE): Acting now to be ready tomorrow

ANRS MIE is responsible for the scientific steering and implementation of PEPR MIE

With the launch of the Emerging Infectious Diseases and Nuclear, Radiological, Biological and Chemical Threats acceleration strategy as part of the France 2030 investment plan, the French government has reaffirmed its commitment to the prevention and control of emerging and re-emerging infectious diseases. The Emerging Infectious Diseases Priority Research Programme and Equipment (PEPR MIE) forms part of this approach and is the preferred funding tool for scientific research projects in these areas. It is in this context that ANRS MIE launched its first call for proposals in 2023 to fund 11 research projects (totalling around EUR 22 million) and support platforms for the demonstration and validation of countermeasures, strengthen training on on emerging infectious diseases through university research schools and anticipate the funding of innovations in the event of a future health crisis. Continuing this momentum, a second call was launched in 2024, based on the same principles: nine projects were selected for funding totalling around EUR 16 million. These projects target research into emerging infectious diseases according to the priority areas defined within the framework of PEPR MIE. They concern the exploration of

innovative strategies to control the transmission of arboviruses; the identification of host and viral factors that influence congenital infections; the understanding of severe respiratory infections and the development of personalised treatments; the neurological impacts of viral infections, particularly those of arboviruses and respiratory viruses; as well as the development of innovative methods for real-time monitoring and modelling.

On 30 September 2024 in Montpellier, a day of dialogue made it possible not only to review the progress made after three years of research and collaboration between the various partners, but also to highlight those individuals selected as part of several measures.

↘ Start: A programme supporting the new generation of scientists

In 2024, ANRS MIE launched the Start programme in order to support young researchers (master's students, doctoral students, post-doctoral fellows) working on its themes (HIV/AIDS, viral hepatitis, tuberculosis, sexually transmitted infections, emerging infectious diseases). Considered a strategic priority by the agency, this support is centred around three areas:

- support for training: ensure quality training for the young scientists;
- support for research: foster the launch of research careers and the development of innovative research;
- support for structuring the scientific community: facilitate, connect and disseminate knowledge.

Held ahead of the annual ANRS MIE Scientific Days, the first Start event, which took place on 20 March 2024 in Paris, brought together and federated the next generation of scientists around the agency's themes. It provided young researchers with an opportunity for professional development, networking and exchange between peers and senior researchers, promoting the sharing of knowledge and experience and the possibility for future collaborations.

https://anrs.fr/en/funding/start-programme/

↘ Research platforms and networks

Clinical research platforms

Four platforms aimed at strengthening our preparedness for the risks of a new major health crisis, and in which ANRS MIE and Inserm are stakeholders, obtained funding in 2024: two as part of the Emerging Infectious Diseases and Nuclear, Radiological, Biological and Chemical Threats acceleration strategy of the France 2030 Investment Plan, and two with European funding.

ANRS MIE, as part of the 'EID and NRBC threats' national strategy, coordinates the establishment of research platforms such as EMERGEN 2.0, OPEN-ReMIE and I-REIVAC Emergence

OPEN-ReMIE: Ensuring a rapid and effective French response to health crises

Led jointly by ANRS MIE and *Hospices civils de Lyon*, OPEN-ReMIE – the National Operational Research Network for Emerging Infectious Diseases – is a national platform intended for therapeutic clinical research into emerging infectious diseases in France. Structured around a network of healthcare institutions, research laboratories and institutional partners, OPEN-ReMIE aims to accelerate the implementation of clinical trials in response to epidemics and pandemics. Inspired by the concept of the '*Plan Blanc*' crisis mechanism for deployment by French hospitals, it acts as a '*Plan Blanc* for therapeutic clinical research', enabling the rapid mobilisation of resources and infrastructures in the event of a health crisis. OPEN-ReMIE is one of the measures of the Emerging Infectious Diseases and Nuclear, Radiological, Biological and Chemical Threats acceleration strategy, aimed at strengthening our preparedness in the face of the risks of a new major health crisis. Its missions are to structure a national clinical research network for an effective response to epidemics; speed up the implementation of clinical trials thanks to innovative methodologies and optimised processes; promote collaboration between academic and industrial players, as well as with international research networks; and develop training and communication tools to strengthen the capacity to respond to health crises.

PROACT EU-Response: Increasing European preparedness for health emergencies

As part of the European Union's Horizon Europe programme aimed at strengthening Europe's preparedness for health emergencies, and in collaboration with 24 partners, ANRS MIE and Inserm launched PROACT EU-Response. Bringing together leading experts in clinical research, laboratory sciences, social sciences and in civil society, the platform implements a holistic approach to pandemic preparedness and is dedicated to developing an integrated strategy, enabling the rapid conduct of clinical trials and mitigating the effects of crises on health and society.

I-REIVAC Emergence: Strengthening France's national vaccine research network

I-REIVAC Emergence is a national clinical vaccine research platform in emerging infectious diseases. Coordinated jointly by ANRS MIE and the Paris public hospitals group (AP-HP), its aim is to strengthen the structure of the I-REIVAC national vaccine research network in order to increase France's capacity to respond quickly and effectively to future infectious threats.
The platform is funded to the tune of EUR 12 million for five years by the National Research Agency (ANR) under the France 2030 Investment Plan. I-REIVAC is also a stakeholder in the European Vaccine Hub, a collaborative network funded by the European Commission (via the Health Emergency Preparedness and Response Authority – HERA) dedicated to strengthening European sovereignty in the field of vaccines for infectious diseases. I-REIVAC Emergence will play a role in the implementation of clinical trials.

> ***The creation of a European clinical trials network for pandemic preparedness through the PROACT EU-Response project and the EU-Response network represents a strategic initiative to encourage coordinated, timely and evidence-based research and innovation throughout Europe. This network will enable us to overcome the fragmentation inherent to current pandemic preparedness efforts, which no existing organisation or association can solve on its own.***
>
> Professor Yazdan Yazdanpanah, ANRS MIE Director and EU-Response Coordinator

FOCUS

From the EMERGEN consortium to EMERGEN 2.0: A platform for genomic surveillance and research on emerging pathogens

The COVID-19 pandemic and the successive appearance of numerous SARS-CoV-2 variants – Alpha, Beta, Gamma, Delta and finally Omicron – have highlighted the necessity to support epidemiological and virological surveillance and research activities by strengthening molecular surveillance, particularly through sequencing.
While France is already organised when it comes to the national surveillance of infectious diseases – particularly thanks to *Santé publique France* (SpF) and the network of National Reference Centres for communicable diseases (CNRs) – the scale of the COVID-19 crisis has shown the necessity to reinforce our sequencing capacities and support research activities to improve our response to epidemics. To remedy this situation, the EMERGEN project, coordinated by ANRS MIE and SpF, using special funds from the French Ministries of Health and Research, was launched. Initially focused on the response to the COVID-19 epidemic, this consortium has endeavoured to:

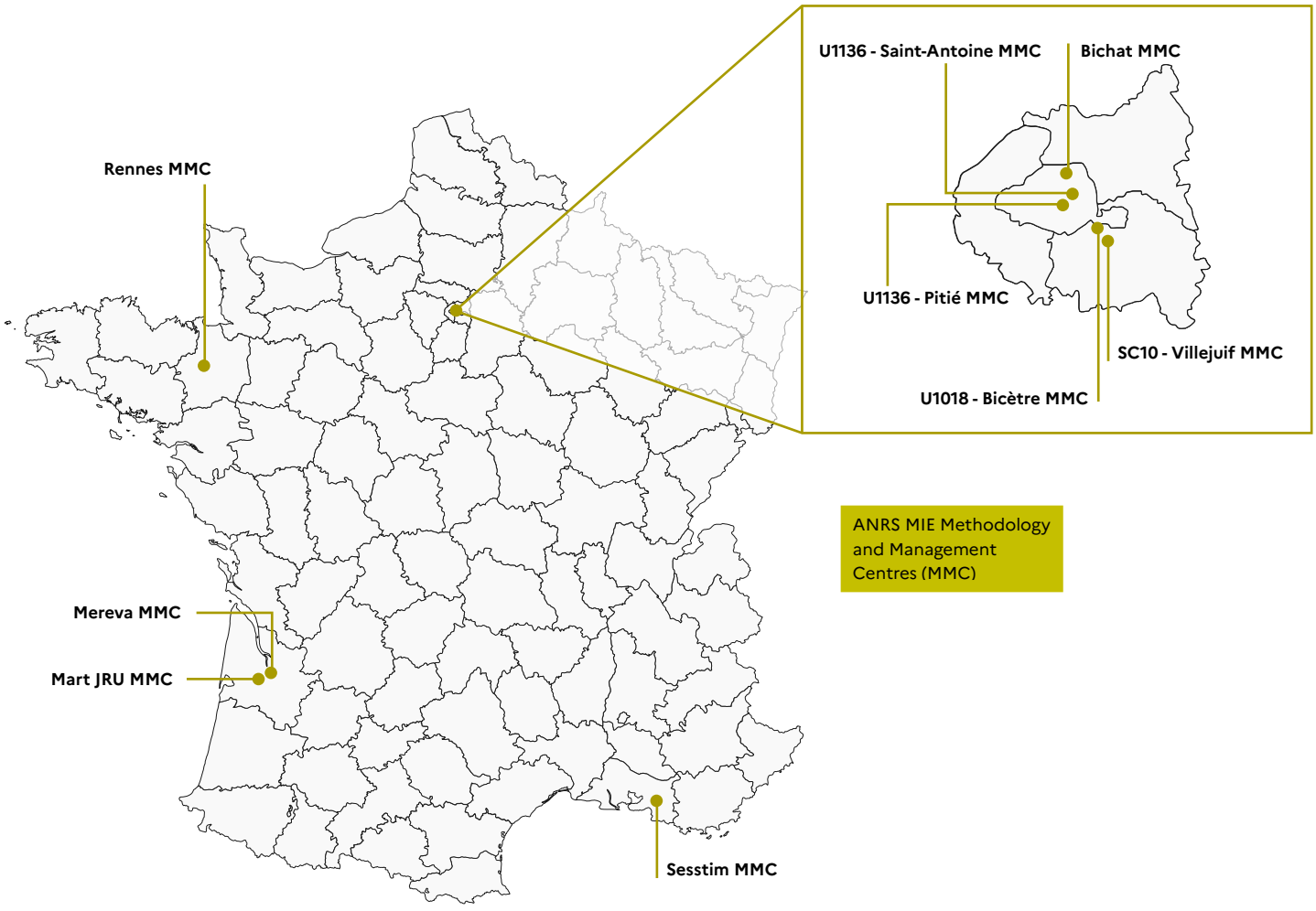
- describe and monitor the circulation of known SARS-CoV-2 variants down to the most detailed territorial level possible, but also detect, identify and then monitor the circulation of novel variants of interest as soon as possible;
- promote and fund research projects within the consortium, linked to the sequencing of novel SARS-CoV-2 variants, particularly in relation to experimental studies and animal models, cohorts, modelling studies and environmental aspects (wastewater).

In 2025, EMERGEN becomes EMERGEN 2.0, broadening its remit to include other emerging pathogens. The consortium also affirms its One Health approach, which brings together the health of humans, animals and the environment, with the addition of Anses to its coordination team.

↘ Clinical research networks

In order to conduct the clinical studies it sponsors, ANRS MIE is supported by several Methodology and Management Centres (MMCs) responsible for the operational coordination of these studies, as well as a network of hospital departments ensuring the inclusion and follow-up of the subjects participating in them. Clinical platforms such as OPEN-ReMIE and I-REIVAC Emergence are also supported by these structures. These players that are essential to the conduct of the research receive in some cases financial support (roles of clinical research associate, project manager, quality specialist, statistician, etc.) as part of the 'Clinical research networks' structuring action.

In 2024, there were ten MMCs in mainland France, six of them in *Ile-de-France*, but also in Bordeaux, Marseille and Rennes. In 2024, several working groups met on various topics, such as Open Science, biobanks, data-sharing, GDPR, and the Investments for the Future programme (PIA).



↘ Research projects

In VIH

The ANRS Rhiviera – Remission of HIV Infection Era – consortium is a multidisciplinary project launched in 2014. Its aim is to synchronise French research community efforts by establishing a public-private collaboration to develop new tools and strategies for sustainable remission of HIV infection. Objectives include understanding the mechanisms to control infection without treatment, identifying predictive markers of viral control or relapse after cessation of treatment, and developing strategies to enable a large number of patients to achieve remissiovn. Research by the consortium is based on a combination of basic and clinical research, as well as on unique cohorts of people infected with HIV, and equivalent models on non-human primates. As such, the results of the primate-VISCONTI study published in 2024 showed that early treatment and control of infection after treatment discontinuation highlighted the existence of a window of opportunity to promote remission from HIV infection (Passaes, *et al*. Nat Com, 2024). The year 2024 also saw the start of enrolments for the ANRS 176 RHIVIERA 02 trial aimed at evaluating the impact on viral control, following discontinuation of antiretroviral therapy, of two HIV-1-specific broad-spectrum neutralising antibodies (bNAbs) versus placebo.

https://anrs.fr/en/scientific-research/research-projects/

© PRINCESSE Projet

The PRINCESSE research project also focuses on HIV. This is an interventional cohort that aims to provide comprehensive sexual and reproductive healthcare to female sex workers in the San Pedro region of Côte d'Ivoire, in collaboration with Ivorian community players. The originality of PRINCESSE lies in the combination of several health services: PrEP (pre-exposure prophylaxis) provision for HIV- female sex workers, early treatment of HIV+ women, screening, vaccination and treatment for hepatitis B, as well as screening and treatment for sexually transmitted infections. The programme also includes contraceptive services, advice on managing menstruation and the identification of situations of dependency. PRINCESSE was implemented in partnership with the community NGO Aprosam, using its static clinic and a mobile clinic to provide quarterly follow-up at the prostitution sites. A workshop to present the scientific results took place in Abidjan on 11 June 2024.

Finally, sponsored by ANRS MIE, the aim of the ELDORADO trial is to determine whether doravirine can be a safe and effective therapeutic alternative to dolutegravir, the standard of care for antiretroviral treatment-naive people living with HIV-1, particularly in resource-limited settings. Conducted in six countries across four continents: South America (Brazil), sub-Saharan Africa (Cameroon, Côte d'Ivoire and Mozambique), Asia (Thailand) and Europe (France), this phase III trial plans to include 610 participants who will be followed up for 96 weeks.

FOCUS

TTHALESS, a One Health approach to the epidemiological study of zoonotic tuberculosis in eastern Democratic Republic of the Congo

Tuberculosis is now the world's deadliest infectious disease. It is also increasingly affecting livestock, domestic and wild animals, thereby becoming a major public health, veterinary and wildlife conservation issue. Funded by ANRS MIE, the TTHALESS project led by Avicenne hospital (AP-HP), Lwiro Natural Sciences Research Centre, Lwiro Primate Rehabilitation Centre and Kahuzi Biega National Park, has adopted the One Health approach in order to study the epidemiological links between human and animal tuberculosis in eastern Democratic Republic of the Congo. Like an open-air laboratory, the environment of the village of Lwiro, with its Research centre, is the ideal place for studying the transmission of zoonoses in order to anticipate new epidemic episodes and avoid the emergence of new infectious diseases with pandemic potential.

The initial findings of this study, which began in 2023, have shown a high prevalence of human tuberculosis (14.5%) but also a case of extra-pulmonary tuberculosis in a chimpanzee at Lwiro Primate Rehabilitation Centre, as well as a few cases in cattle farms in the region. The genetic study of the strains found during this study, which will be carried out at Avicenne hospital, should soon shed light on the inter-species transmission links at play on-site. This project could transform not just the way tuberculosis is tackled in resource-limited areas, but also how the disease is viewed generally.

In tuberculosis

Despite universal access to antiretroviral therapy, many patients still present at a late stage of HIV infection. In these severely immunocompromised patients, tuberculosis is the most common cause of hospitalisation and death. The ANRS 12424 DATURA trial, sponsored by ANRS MIE and co-funded by the EDCTP2 European & Developing Countries Clinical Trials Partnership programme, aims to improve HIV/tuberculosis co-infection care in the most vulnerable patients, particularly those hospitalised with a severely compromised immune system (CD4 < 100/mm3). Conducted in five countries in Africa (Cameroon, Guinea, Mozambique, Uganda, Zambia) and one in Asia (Cambodia), it illustrates international mobilisation around this major public health issue. The intervention combines increased doses of antibiotics during the first eight weeks of tuberculosis treatment, with the addition of corticosteroids for six weeks. The objective is to assess whether the intensified treatment reduces mortality at 48 weeks compared to standard of care. Enrolment, which began in April 2022, ended in December 2024 with 907 participants following the recommendation of the independent data monitoring committee to stop recruitment. DATURA is one of the only ongoing clinical trials to enable in-depth follow-up of severely immunocompromised patients living with HIV who are receiving intensified tuberculosis therapy compared to standard of care. DATURA is internationally recognised. It features in the WHO report entitled 'The advanced HIV disease research landscape', published in 2024, and is therefore considered important for the future care of those living with HIV and tuberculosis. The results of DATURA, which will probably become available in mid-2026, could play a key role in the development of future WHO treatment recommendations.

In viral hepatitis B and C

The ANRS CO22 HEPATHER cohort, entitled 'Therapeutic options in hepatitis B and C', is a vast cohort launched in 2012 aimed at improving knowledge and care of hepatitis B and C. A total of 20 857 patients had been included in 38 centres in France and Belgium. The follow-up visits were all completed by 31 December 2024, end date for the collection of the clinical, therapeutic and biological data. Since its launch, HEPATHER has made a

large contribution to research, with 70 conference presentations and 49 scientific publications. In particular, it has provided major findings on the clinical efficacy and safety of direct-acting antivirals in the treatment of hepatitis C. These findings have led to changes in the national patient care guidelines. Given the effectiveness of current treatments, the follow-up of hepatitis C patients is now complete. The study continues for patients with hepatitis B, thanks to a new national cohort project, ANRS 0551s HEPAT-B, funded by ANRS MIE, in which a specific four-year follow-up is envisaged (starting in autumn 2025).

Detect and control: Preparing the response to emergences

INTEGRATE: The first global alliance against Lassa fever

Lassa fever is a viral haemorrhagic fever similar to Ebola, underestimated despite the devastation it causes. Every year, more than 900 000 people are infected with the virus in Benin, Liberia, Togo, Nigeria and Sierra Leone. Transmitted through contact with rats or person-to-person through bodily fluids, Lassa fever is virulent, killing infected people within 10 days of symptoms onset if left untreated. To address this, the INTEGRATE consortium, an unprecedented global alliance, has launched a large-scale five-year clinical trial. Funded by ANRS MIE, followed by the Global Health EDCTP 3 (European Union) programme, it is sponsored by the Irrua Specialist Teaching Hospital (Nigeria) and ANRS MIE. It brings together 15 research institutes, healthcare institutions and humanitarian organisations from 10 countries in West Africa and Europe, as well as the USA.

MUCOBOOST: An innovative clinical trial to prevent infectious diseases

Five years after the COVID-19 pandemic, Tours regional university hospital (CHRU) and ANRS MIE, co-sponsors, received the go-ahead to start the MUCOBOOST clinical trial. Based on unprecedented technology, this vaccine candidate could revolutionise the prevention of respiratory infections. Developed by Tours-based start-up and biotechnology expert Lovaltech, this innovation positions France as a pioneer in next-generation vaccination. Administered as a nasal spray, this protein-based vaccine is expected to provide complete protection (mucosal and systemic) against COVID-19. It is also expected to provide effective protection against all variants of the virus and block its transmission, thereby reducing human contagiousness.

https://anrs.fr/en/publications/

↘ Recommendations and expert reports

Initial results of the Context of sexualities in France 2023 major national survey

In recent decades, major changes in French society have had an impact on representations and practices in the field of sexuality and sexual health. In order to better understand these changes, ANRS MIE had initiated and funded the 2023 'Context of sexualities in France' study conducted by researchers from Inserm and Paris 1 Panthéon-Sorbonne University, together with a multidisciplinary team.
Three themes structure this research, whose findings were presented in November 2024:

- study of the diversification of sexual representations, practices and trajectories in a rapidly changing social context;
- analysis of the effect of living conditions on sexual trajectories;
- analysis of the positive and/or negative relationships between health status (mental health, chronic diseases or functional limitations) and different dimensions of sexuality.

This fourth study on this subject in France (the previous one being in 2006) is intended to provide key indicators to guide the national sexual health strategy for 2030.

HIV: New care recommendations

On the occasion of the French AIDS Society (SFLS) congress held on 20 – 22 November 2024, ANRS MIE, the French National AIDS Council (CNS) and the National Authority for Health (HAS) published updated recommendations for the therapeutic, curative and preventive care of people living with HIV and people who are exposed to HIV. These recommendations include the new pre- and post-exposure preventive treatments, gynaecological, obstetric and paediatric aspects, antiretroviral treatment particularities and the infectious complications associated with HIV infection. It should be noted that the publication of all the updated

recommendations for the management of sexually transmitted infections is underway and will be finalised during the course of 2025.

AvATher working group: Providing expertise on viral respiratory infections

AvATher – Antivirals and Therapeutic mono-clonal Antibodies – is an ANRS MIE advisory expert group that provides evidence-based opinions on antiviral molecules and monoclonal antibodies targeting COVID-19, but also other respiratory viruses, in the final phase of preclinical development or in the clinical phase.

During the course of 2024, the group coordinated by Professors Laurence Weiss and Lionel Piroth worked on the cap-dependent endonuclease (CEN) inhibitor Xofluza® (baloxavir marboxil) in the context of the increase in outbreaks of highly pathogenic avian influenza (HPAI) H5N1 and the emergence of human cases of influenza A (H5N1). The opinion was published in early 2025.

Part 3:

International collaborations and partnerships

Because infectious diseases know no borders, ANRS MIE has endeavoured to combat international epidemics since its inception. It facilitates and coordinates a network of key partners, bringing together a variety of institutions and authorities in research and health. In France, West Africa, Central Africa, South-East Asia and Brazil, this International network aims to bring together stakeholders, define research priorities and pool resources. There are two forms of partnership within the network: partner sites, which are the first partnerships created in the 1990s, and International Research Platforms in Global Health (PRISMEs) developed from 2022 onwards. Finally, new collaborations have also been implemented – with South Africa and Germany in particular.

Supporting and facilitating the ANRS MIE International network

Strengthening Franco-Brazilian scientific cooperation on arboviral diseases

Arboviral diseases are infections caused by viruses transmitted to humans or other vertebrates by certain types of haematophagous arthropods (mosquitoes, ticks, sandflies and culicoides). The Amazon basin, which includes French Guiana, is particularly exposed to the emergence of such diseases and is a strategic site to study them and anticipate health crises in a coordinated way. The One Health approach, which links human, animal and environmental health, is crucial here. In the recent context of a very significant increase in the number of cases of dengue and the spread of the Oropouche epidemic in Brazil, *Instituto Evandro Chagas* and ANRS MIE, with the support of the French Embassy in Brazil and in partnership with Arbo-France network for human and animal arboviral disease watch, surveillance and overseas research in metropolitan France and the territories, held a workshop in October 2024 in Belém on the theme of improving preparedness and response to global arboviruses through research collaboration. It was a forum to discuss potential synergies between the French and Brazilian research networks and to pave the way for the design of national and international joint projects addressing global health questions posed by arboviruses. A few weeks earlier, at the Franco-Brazilian Joint Committee in Manaus, ANRS MIE and the Brazilian National Council for Scientific and Technological Development (CNPq) signed an agreement creating a cooperation framework for events organisation, knowledge-sharing, cross-expertise provision and the development of joint projects between French and Brazilian teams.

Refining infectious disease control strategies with Cambodia

A solid partnership between France and Cambodia was initiated in the 1990s and formalised by an agreement between the Cambodian Ministry of Health and ANRS MIE in 2000, through the ANRS MIE partner site in Cambodia. This partnership is based on two major Cambodian institutions: the Phnom Penh University of Health Sciences and the Pasteur Institute of Cambodia. It has created a privileged framework for scientific collaborations, bringing together Cambodian, French and international experts to refine strategies to combat infectious diseases. On 10 and 11 October 2024, Cambodia hosted a new edition of the ANRS MIE partner site's Scientific Days event. Held every two years, it is a key moment in which to share advances in infectious disease research, offer the opportunity to present the findings of recent research, and discuss future research priorities to address local and regional health challenges. It brought together over 400 participants face-to-face and online from 17 different countries: researchers, clinicians, civil society and patient organisation representatives, as well as representatives of the Cambodian, French and international authorities. Findings of major studies were presented for the first time, as well as the TA PROHM project, which aims to design and evaluate a programme to reduce mother-to-child transmission of hepatitis B.

↘ Funding collaborative research

Franco-German collaboration to further research into infectious diseases

Franco-German collaboration to further research into infectious diseases
ANRS MIE and the German Centre for Infection Research (DZIF) have made a commitment in favour of collaborative research in HIV/AIDS, viral hepatitis, tuberculosis and emerging infectious diseases. In the context of this partnership, collaborative activities include supporting exchange programmes for young researchers in order to encourage intra-European collaborative research. ANRS MIE and DZIF are also working on the development of joint research projects and the possibilities for additional funding, including at European Commission level. Their memorandum of understanding envisages the mutual provision of expertise by the personnel and experts associated with the organisations, to deepen collaborative efforts, which extends to reinforcing advocacy and lobbying activities on the key scientific strategies that impact the infectious disease research landscape.

FOCUS

Franco-South African collaboration: First joint call for proposals on tuberculosis

Longstanding partners when it comes to research project set-up and scientific facilitation in their shared thematic fields, ANRS MIE and the South African Medical Research Council (SAMRC) have decided to join forces and align their priorities by launching a joint call for proposals on tuberculosis.

The aim of this initiative is to accelerate progress in the global fight against this disease by initiating and supporting international collaborations between South Africa and France. The results of this call are expected in 2025.

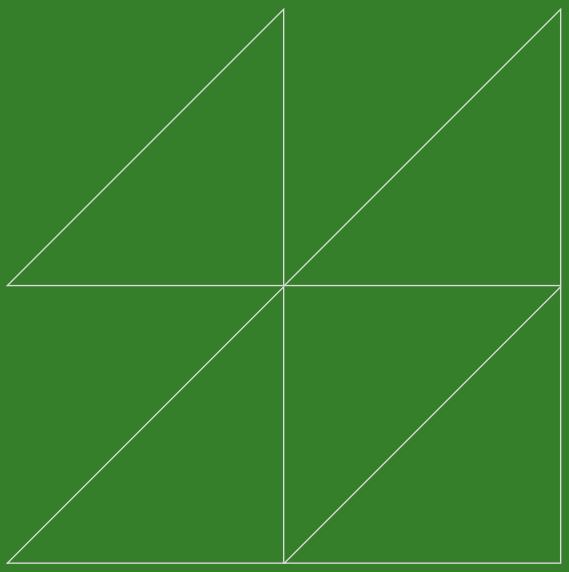
Institutional partnerships

Infectious diseases: ANRS MIE and Unitaid strengthen their collaboration for 2023-2027

In 2024, Unitaid and ANRS MIE formalised their collaboration by signing a memorandum of understanding in which they undertake to accelerate the transformation of scientific advances into concrete solutions, aimed at protecting the most vulnerable populations against infectious diseases, primarily in low- and middle-income countries. ANRS MIE is mobilising its networks of researchers and experts to support this collaboration. Unitaid is working to accelerate the introduction and adoption of the most suitable innovative health products by removing the various obstacles to their marketing and wider deployment among those that need them most. By combining their resources and expertise, the two organisations are convinced that they can significantly accelerate access to vital health products, thereby contributing to the achievement of the health-related sustainable development goals.

Vaccines: ANRS MIE and the International Vaccine Institute (IVI) have signed a five-year memorandum of understanding

The International Vaccine Institute (IVI) is an organisation founded in 1997 whose mission is to discover, develop and deliver safe, effective and affordable vaccines for global health. Their priority disease areas include cholera, typhoid, chikungunya, shigella, salmonella, schistosomiasis, group A streptococcus, hepatitis E, HIV and COVID-19, as well as other urgent global health issues such as antimicrobial resistance. On 17 June 2024, IVI and ANRS MIE signed a historic memorandum of understanding in Paris. The main objective of this partnership is to foster clinical research, with a focus on the healthcare needs of low- and middle-income (LMIC) countries. This initiative mobilises the members of the ANRS MIE International Network.



Part 4:

Facilitating research communities

ANRS MIE brings together scientific community players within a variety of groups: Coordinated Actions, working groups and sub-groups, networks, task forces, etc. The objective is to promote dialogue between researchers from different institutions or specialist areas and representatives of patient organisations. These facilitation meetings aid reflection on specific themes, encourage research collaborations and the design of innovative projects, highlighting priority areas for research or, on the contrary, areas that receive less attention despite being necessary. The international symposia and Scientific Days heed the same logic of research community facilitation and research presentation.

↘ Scientific facilitation groups:

Since its inception, ANRS MIE has set up some twenty Coordinated Actions, networks and working groups. The year 2024 was marked by the launch of two new Coordinated Actions and one new working group.

The Mother-Child Coordinated Action, launched in 2024, aims to cover the entire remit of ANRS MIE while addressing its scientific research priorities. Interdisciplinary and inter-thematic, it works in a cross-cutting and complementary manner with the other thematic Coordinated Actions, specifically targeting vertical transmission, and populations of mothers, children and adolescents. The Mother-Child Coordinated Action focuses on three main areas: basic science, clinical research and public health. Its main missions include sponsoring research projects on children, adolescents and pregnant women in HIV, hepatitis and emerging infectious diseases, reflecting on the inclusion (or exclusion) of these populations in clinical trials and studies, and setting up high-impact cross-cutting and structuring projects. It plays a key role as an interface with the Mother-Child working groups of the other Coordinated Actions, thus promoting a coordinated and integrated approach.

Launched on 12 December 2024 at Institut Pasteur in Paris, **the ANRS MIE Diagnostic, Therapeutic and Vaccine Viral Targets Coordinated Action** aims to structure cross-cutting interdisciplinary research to develop tools against emerging viruses. It focuses on identifying viral targets to drive progress in the development of diagnostic tools, treatments and vaccines. This research will involve collaborations with players involved in basic research, preclinical development, clinical research, and the development of products and technology. The launch event, designed

to organise cross-cutting interdisciplinary research, brought together players from a variety of scientific fields, such as chemistry, virology, structural biology and bioinformatics. Its objective was to unite and consolidate the topics and themes of the Coordinated Action with discussion sessions on the progress and obstacles observed in the identification of viral targets.

Finally, still in the launch phase, **the Infodemia and epidemic crises working group** was set up in September 2024, initially against the background of the mpox epidemic upsurge in the Democratic Republic of the Congo and neighbouring countries, with a desire to extend its scope of reflection to include other epidemic crises. Its objectives are to analyse the mechanisms for disseminating and adhering to health information, define strategies for monitoring and informational analysis, and develop and evaluate methods to counter disinformation and strengthen community mobilisation. The originality of this working group, which meets every month, lies in the diversity of its members' fields of expertise (anthropology, sociology, psychology, public health, infectious diseases, epidemiology, communication sciences, journalism, patient and user representatives, etc.) and in those of the countries represented, not just France but also those with which ANRS MIE has partnerships: Burkina Faso, Cameroon, Côte d'Ivoire, Guinea, Democratic Republic of the Congo and Senegal.

The scientific facilitation groups all held get-togethers, conferences and symposia throughout the year.
Among the Working Groups already active, Arbo-France is a multi-institutional and multidisciplinary French network for the study of human and animal arboviral diseases. Held on 24 and 25 October 2024 at Institut Pasteur in Paris, its annual conference focused on the role of research in the fight against arboviral emergences – more specifically yellow fever, arboviruses transmitted by culicoides, and viral tick-borne diseases. Bringing together around 200 researchers covering all disciplines of the domain, its primary objective was to facilitate preparedness and response to human and animal arboviral disease epidemics in mainland France and the overseas territories.

https://anrs.fr/en/scientific-research/scientific-facilitation-groups/

↘ International symposia

AFRAVIH 12th international French-speaking conference

Bringing together international French-speaking players in HIV, hepatitis, sexual health and emerging infections research and care, the 12th edition of the AFRAVIH international French-speaking conference took place in Yaoundé, Cameroon, on 16 to 19 April 2024. ANRS MIE, which has supported AFRAVIH since its inception, held the 'Perspectives for HIV/AIDS therapeutic research in Africa' symposium in collaboration with the WHO. An opportunity to discuss WHO research priorities and guidelines, new HIV treatment strategies in sub-Saharan Africa, and to present studies in children living with HIV. Eight studies supported by ANRS MIE were selected as the subjects of oral presentations. ANRS MIE also manned a stand together with Expertise France.

AFROSCREEN 2024 regional symposium

Coordinated by ANRS MIE as part of a consortium with Institut Pasteur and the French National Research Institute for Sustainable Development (IRD), AFROSCREEN was launched in July 2021 in response to the COVID-19 epidemic. The stakeholders of the project, funded to the tune of EUR 10 million by the French Development Agency (AFD), endeavour to establish or reinforce sequencing platforms and to create an operational network for monitoring emerging pathogens in West Africa, Central Africa and Madagascar. With 25 partners in 13 sub-Saharan African countries, AFROSCREEN improves the detection, characterisation and genomic surveillance of emerging pathogens for epidemic preparedness and response. On 29 and 30 May 2024, the 'AFROSCREEN regional symposium: a genomic surveillance network for emerging pathogens' took place in Dakar (Senegal), the objective of which was to take stock of the scientific and technical achievements of the project and discuss the prospects for capitalising on this network.

AIDS 2024

The 25th International AIDS Conference, held by the International AIDS Society, with the financial support of ANRS MIE, took place on 22 to 26 July 2024 in Munich, Germany. This was an opportunity for French research to take stock of the work carried out and dialogue with international HIV stakeholders. Co-organised by the ANRS MIE Rhiviera – Remission of HIV Infection ERA – consortium, a satellite session was devoted to the immune control of viral reservoirs. Rhiviera aims to explore and develop new strategies to achieve sustained remission of HIV infection following discontinuation of antiretroviral therapy and without experiencing viral rebound.

FOCUS

A Scientific Day devoted to long COVID

ANRS MIE, *Santé publique France* (SpF) and the French National Authority for Health (HAS) dedicated a Scientific Day to long COVID on 14 October 2024 at *PariSanté Campus* in Paris. Faced with the challenge posed by long COVID to the health of those affected, to public health and to healthcare professionals, the aim of this event was to mobilise researchers, patient organisations – particularly those representing civil society such as #aprèsJ20-Covid long France, and institutions, in order to strengthen their collaborations. Its aim was also to take stock of scientific progress, address outstanding questions and define future research priorities for ANRS MIE and its partners. During this event, several research areas were covered: epidemiology, pathophysiology and clinical trials. Researchers and clinicians presented the advances in their studies into the underlying mechanisms of the disease, which will make it possible to better characterise post-COVID syndromes, understand their clinical forms to improve diagnosis and propose more appropriate care.

↘ ANRS MIE Scientific Days

Focus of 2024: The transmission of infectious diseases

Focus of 2024: The transmission of infectious diseases
On 21 and 22 March 2024, ANRS MIE held its major annual Scientific Days event at the International Conference Centre of Sorbonne University in Paris. The main theme for 2024 was the transmission of infectious diseases. Renowned scientists from France and other countries were present to discuss the challenges and latest news related to the various diseases within the remit of ANRS MIE. Responding to the continued desire to focus on the future, a special place was given to the new generation of researchers.

Bringing together around 400 people from around the world, this event addressed the following topics:

- Mother-child transmission of HIV and hepatitis.
- Living with HIV/AIDS from birth to older age.
- Tuberculosis: contrasting impacts across the world.
- Blocking transmission at different levels.
- Towards the elimination of chronic viral diseases in public health.
- Future epidemics here and elsewhere: the importance of vector transmission.

Part 5:

Organisation and governance

Key figures from the 2024 calls for proposals

Research project funding

24.9 M€
for projects in HIV, hepatitis, STIs, tuberculosis (including RA)

24.8 M€
for emerging infectious diseases

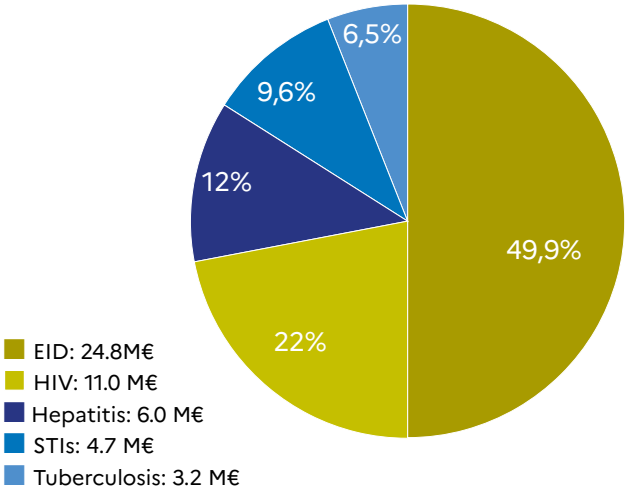
Emerging infectious diseases: distribution of funding by pathogen

13.5 M€
Respiratory viruses
> 27% of the total

8.2 M€
Arboviral diseases (including vector control)
> 26.5% of the total

3.2 M€
Other emerging infectious diseases
> 6.4% of the total

Distribution of funding by disease: 49.7 M€



Total: 155 successful applicants from 6 calls for proposals (CFPs)

2 generic CFPs on themes falling within the agency's historical remit 51 projects, 50 research grants and 23 initiation contracts

1 ReCH-MIE hospital clinical research CFP on emerging infectious diseases: 5 projects

1 Emergences in LMICs – France-LMIC collaboration and research on emerging infectious diseases CFP: 7 projects and 4 research grants

1 PEPR MIE CFP: 9 projects

1 START programme call for applications for 6 grants: 4 arboviral disease or modelling of infectious disease thesis grants; 2 master's grants

Distribution of funded projects and funded research grants (155) by major discipline:

Public health/HSS research: 28 projects
6.7 M€

Basic research: 89 projects
18.9 M€

Clinical research: 32 projects
18.2 M€

Innovation: 6 projects
6.6 M€

The budget and its use

↘ In 2024, ANRS MIE managed several sources of funding:

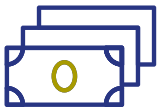
Subsidies paid to the ANRS MIE budget

First of all, the agency received a subsidy for public service costs totalling EUR **50 million** paid by the French Ministry of Higher Education and Research.

40 M€
Annual funding for HIV, hepatitis, STIs, tuberculosis

10 M€
Funding for emerging infectious disease research activities (crises, LMICs)

- **Generic call for proposals**
- **LMIC emergences**
- **Start programme**
- **Top-down structuring projects**
- **Joint calls for proposals**



PEPR MIE 2024 call for proposals

16 M€
Funding excellence for research and innovation in emerging infectious diseases

- **PEPR call for proposals**
- **'Chairs'**
- **Infrastructure**
- **Project with top-down approach within the PEPR**

In addition, PEPR MIE, which the agency leads and coordinates, had a budget of EUR **16 million** to fund research projects in emerging diseases.

Finally, on behalf of the French Directorate General for Care Provision (DGOS), the agency led a call for proposals supporting clinical research, endowed with **EUR 10 million**

Funding with ANRS MIE steering / DGOS management

10 M€
Annual RechMIE funding for clinical research projects in emerging infectious diseases

- **Emerging infectious disease research call for proposals**

Other sources of funding

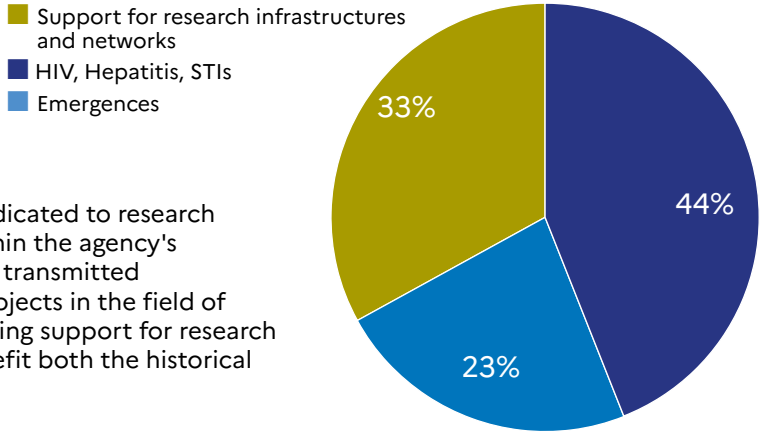
- **National institutions (e.g. MEAE)**
- **International partnerships**
- **European Union**
- **Structuring research programmes**

ANRS MIE also mobilises its own resources to support structuring projects, particularly in the field of emergences. As such, it is the recipient and coordinator of several sources of European funding aimed at strengthening pandemic preparedness and structuring clinical study networks at European level. It is also supported by international bodies working in the field of emerging diseases. Finally, the French Ministry for Europe and Foreign Affairs supports its international development through a specific grant.

2024 budget

Research expenditure

51.33 M€



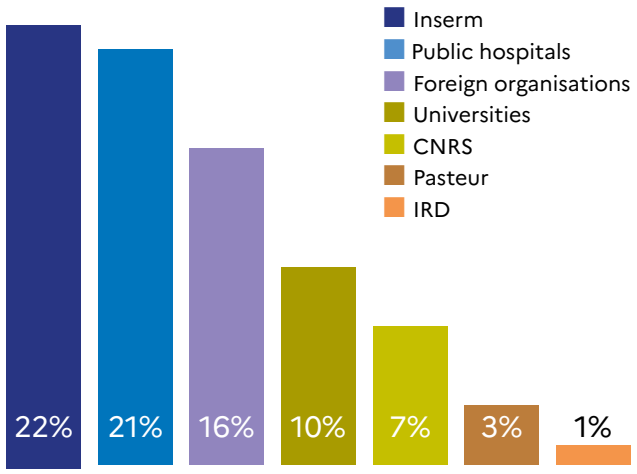
Out of the EUR 51.33 million directly dedicated to research in 2024, 44% funded projects falling within the agency's 'historical' remit (HIV, hepatitis, sexually transmitted infections, tuberculosis), 23% funded projects in the field of emergences, and 33% funded cross-cutting support for research infrastructure and networks (which benefit both the historical remit and emerging infectious diseases).

71.83 M€

EUR 71.83 million was allocated to expenditure.

A total of 86.5% of this was consumed overall, i.e. EUR 62.15 million, almost all of which for the sole part funded by recurrent State resources, in a context of early closure of the financial and accounting management software and the postponement of a structuring project to 2025.

This budget made it possible to fund the agency's operating expenses, including its payroll of EUR 8.6 million, and research expenses of EUR 51.33 million.

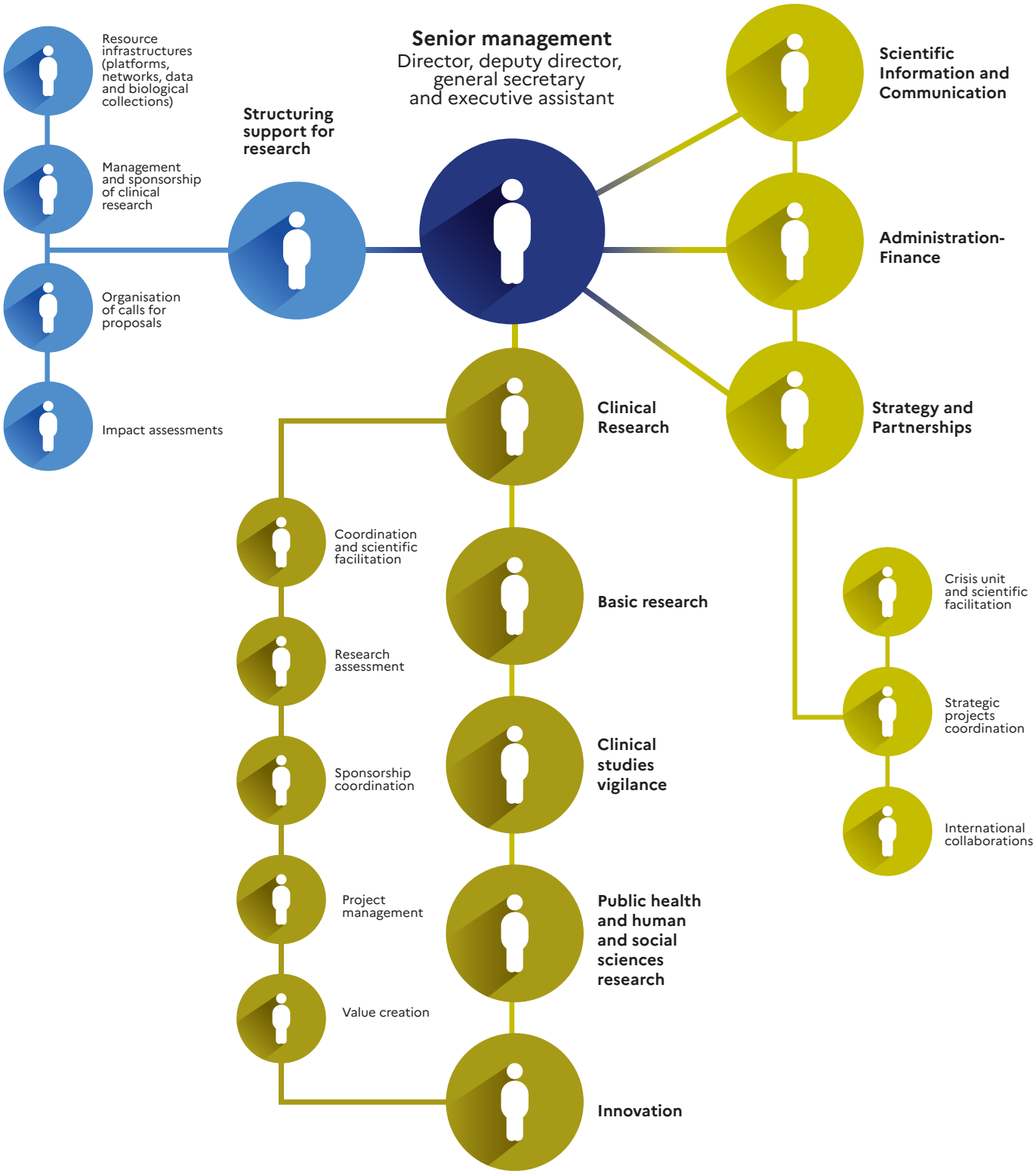


In France, these resources allocated for the research programmes were distributed mainly between Inserm (22%), public hospitals (21%), universities (10%), CNRS (7%), Institut Pasteur (3%) and IRD (1%). At the same time, 16% of the resources were directed towards organisations located abroad and their partners as part of calls for proposals specifically funding partnership research with LMICs, and for the major structuring projects on emergences, namely AFROSCREEN and CoviCompare Africa.

It should be noted that these figures do not include, due to the accounting principles applicable to them, the resources allocated by the agency to third-party organisations under PEPR MIE. Expenditure under ReCH-MIE, an initiative led by the agency but whose support is managed by the Directorate General for Healthcare Provision (DGOS) with the beneficiary organisations directly, is also not included in these figures.

Human Resources

End 2024 126 Collaborators



Governance bodies

ANRS MIE is governed by three boards:

Scientific Advisory Board

It gives an opinion on the agency's main scientific strategy orientations and on its activities. It also conducts forward-looking reflection.

Chair: Sharon Lewin, University of Melbourne, The Doherty Institute, Australia
and Fabien Zoulim *Hospices Civils de Lyon*, Joint Research Unit Inserm – Claude Bernard Lyon 1 University U1350 PaThLiv, Lyon Hepatology Institute, France

Advisory Board

Tasked with making proposals and deliberating on the agency's major strategic orientations.

Chair: Isabelle Richard
First Vice-President of Angers University

Partners Board

A space to share information on the agency's activities, but also on the latest news and the challenges of research within the given fields. It is made up of personalities from hospitals and universities, industry, health agencies, scientific and health authorities, learned societies, young healthcare and research professionals, associations and NGOs, and civil society.

ANRS MIE also has two scientific evaluation bodies

The Scientific Committees

These eight bodies scientifically evaluate applications for funding. They may be formed on a permanent or temporary basis (for calls for proposals or specific missions), and must include at least eight members, at least one third of whom from abroad.

Cohort Evaluation Committee

Made up of international and independent multidisciplinary experts, it meets over a three-year cycle to conduct a scientific evaluation of the agency's cohorts.

Part 6:

Selective bibliography

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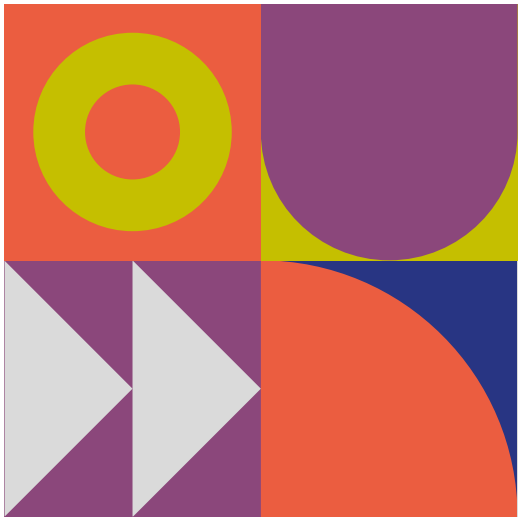
Abbreviations

CFP: Call for proposals
AFD: French Development Agency
ANR: French National Research Agency
ANRS: French Agency for Research on AIDS and Viral Hepatitis
ANRS MIE: ANRS Emerging Infectious Diseases
ANSES: French Agency for Food, Environmental and Occupational Health & Safety
AP-HP: Paris Public Hospitals Group
ARS: French Regional Health Agency
ARV: antiretroviral
AvAThер: Antivirals and Therapeutic monoclonal Antibodies
BE READY: Building a European Strategic Research and innovation Area in Direct Synergy with other EU and International Initiatives for Pandemic Preparedness
CEN: cap-dependent endonuclease
CHRU: French regional university hospital
CIRAD: French Agricultural Research and International Cooperation Organisation
MMC: Methodology and Management Centre
CNPq: National Council for Scientific and Technological Development of Brazil
CNR: French National Reference Centre for the Fight against Communicable Diseases
CNRS: French National Centre for Scientific Research
CNS: French National AIDS Council
SSC: Sector Scientific Committee
CORC: Collaborative Open Research Consortium
COVARS: French Committee for Monitoring and Anticipating Health Risks
CT-CM: Clinical Trial Coordination Mechanism
DGOS: French Directorate General for Healthcare Provision
DZIF: German Centre for Infection Research
EDCTP2: European & Developing Countries Clinical Trials Partnership
HAS: French National Authority for Health
HERA: Health Emergency Preparedness and Response Authority
Inserm: French National Institute of Health and Medical Research
STI: sexually transmitted infection
IRD: French National Research Institute for Sustainable Development
IVI: International Vaccine Institute
LAV: Lymphadenopathy Associated Virus
EID: emerging infectious disease
WHO: World Health Organization OPEN-
ReMIE: National Operational Research Network for Emerging Infectious Diseases
ORSEC: Organisation of the civil security response
PEPR MIE: Priority Research Programme and Equipment that is part of the acceleration strategy
LMIC: low- and middle-income country
PrEP: pre-exposure prophylaxis
PRISME: International Research Platform in Global Health
Rhiviera: Remission of HIV Infection Era
SAMRC: South African Medical Research Council
SFLS: French AIDS Society
SpF: *Santé publique France*
SRAS-CoV: severe acute respiratory syndrome coronavirus
PHEIC: Public Health Emergency of International Concern
HIV: human immunodeficiency virus



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