

EVALUATION REPORT OF THE UNIT
iPLesp - Institut Pierre Louis d'épidémiologie et de
santé publique

UNDER THE SUPERVISION OF THE
FOLLOWING ESTABLISHMENTS AND
ORGANISMS:

Sorbonne Université - Sorbonne U

Institut national de la santé et de la recherche
médicale - Inserm

EVALUATION CAMPAIGN 2023-2024
GROUP D

Report published on April, 05 2024



In the name of the expert committee:

Emmanuel Lagarde, Chairman of the committee

For the Hcéres:

Stéphane Le Bouler, acting president

Pursuant to Articles R. 114-15 and R. 114-10 of the Research Code, the evaluation reports drawn up by the expert committees are signed by the chairs of these committees and countersigned by the president of Hcéres.

To make the document easier to read, the names used in this report to designate functions, professions or responsibilities (expert, researcher, teacher-researcher, professor, lecturer, engineer, technician, director, doctoral student, etc.) are used in a generic sense and have a neutral value.

This report is the result of the unit's evaluation by the expert committee, the composition of which is specified below. The appreciations it contains are the expression of the independent and collegial deliberation of this committee. The numbers in this report are the certified exact data extracted from the deposited files by the supervising body on behalf of the unit.

MEMBERS OF THE EXPERT COMMITTEE

Chairperson:

Mr Emmanuel Lagarde, Inserm, Bordeaux

Experts:

Mr Ronan Garlandezec, Université de Rennes 1

Mr Nicolas Leveque, Université de Poitiers

Mr Antoine Pariente, Université de Bordeaux

Ms Valérie Siroux, Inserm, Grenoble

Mr Joël Sor, Centre de coopération internationale en recherche agronomique pour le développement (CIRAD), Paris

Mr Samuel Soubeyrand, Institut national de recherche pour l'agriculture, l'alimentation et l'environnement (Inrae), Avignon

Mr Mario Speranza, Université de Versailles Saint-Quentin-En-Yvelines

HCÉRES REPRESENTATIVE

Mr Arnaud Seigneurin

REPRESENTATIVES OF SUPERVISING INSTITUTIONS AND BODIES

Mr Wilfried Le Goff, Sorbonne Université

Mrs Jacqueline Capeau, Inserm

Mr Rémy Slama, Inserm

Mr Yazdan Yazdanpanah, Inserm

CHARACTERISATION OF THE UNIT

- Name: Institut Pierre Louis d'épidémiologie et de santé publique
- Acronym: iPLesp
- Label and number: UMR-S 1136
- Composition of the executive team: M. Fabrice Carrat

SCIENTIFIC PANELS OF THE UNIT

SVE Sciences du vivant et environnement
SVE7 Prévention, diagnostic et traitement des maladies humaines

THEMES OF THE UNIT

The Institute focuses on epidemiology and health services research, including clinical, population, social, and environmental epidemiology, pharmacoepidemiology, with strengths in biostatistics, statistical/mathematical modelling, and clinical trials. Key topics are communicable diseases (COVID-19, influenza, HIV, viral hepatitis), nosocomial/emerging infections, chronic diseases (inflammatory, mental disorders), and health social inequalities/determinants.

From 2017-2022, main themes were:

1. Improving surveillance, participatory surveillance methods, and developing models for infectious diseases prediction and intervention evaluation (SUMO team).
2. Conducting large-scale clinical cohorts on HIV, hepatitis, HIV-hepatitis co-infection to evaluate antiviral treatments' risks/benefits (CLEPIVIR team).
3. Optimizing HIV antiviral efficacy, studying HIV-cancer interactions, evaluating HIV transmission prevention (THERAVIR team).
4. Studying impact of urban environments, mobility, transport on health (NEMESIS team).
5. Evaluating drug/multimodal management in inflammatory diseases or elderly, using large medico-administrative databases (PEPITES team).
6. Identifying social health determinants, impact of social inequalities, particularly on mental health, addictions (ERES team).

Since January 2020, the Institute has focused on SARS-CoV-2 research across various fields: modelling, surveillance, population and clinical epidemiology, virology, therapeutic evaluation, social epidemiology. This led to significant contributions in public health knowledge/decision-making, media visibility, and participation in public health/research steering committees (HAS, COVARIS, REACTING, ANRS-MIE) and European projects (EU RESPONSE, HORIZON EC ESCAPE).

HISTORIC AND GEOGRAPHICAL LOCATION OF THE UNIT

The Pierre Louis Institute of Epidemiology and Public Health was created in January 2014 and renewed in 2019 with seven research teams.

The Pharmacoepidemiology and evaluation of care strategies (PEPITES) team coordinated by Florence Tubach, originally affiliated to the University of Paris Diderot, joined in 2019. In 2021, the EPAR team - Epidemiology of Allergic and Respiratory Diseases, led by Isabella Annesi-Maesano joined a new lab at Université de Montpellier. The latter team is therefore not included in this assessment.

The unit is situated in two main locations:

- Saint-Antoine School of Medicine (912 m² + 260 m² in 2024);
- Caroli building (Saint-Antoine hospital) (100 m²);
- Adicare building (Pitié hospital) (260 m²)

RESEARCH ENVIRONMENT OF THE UNIT

The IPLESP is affiliated to Sorbonne University and Inserm. The unit is strongly linked to clinical departments of AHPH and in particular with Departments of infectious diseases, gastroenterology, rheumatology, oncology, microbiology laboratories, pharmacy and support structures for hospital research (clinical research units, pharmaco-epidemiology center of the AHPH, public health hospital services), as well as primary care medicine. As of December 31, 2022, the IPLESP is organized into six research teams, each supported by administrative and information technology staff. The teams are located in Saint-Antoine and Pitié-Salpêtrière Faculty of Medicine and hospitals, which are within a 30 minutes walking distance from each other.

IPLESP is affiliated with doctoral schools ED393 - Epidemiology and Biomedical Information Sciences, and ED515 - Complexity of Living Systems.

The COVID-19 commitment impacted research activities and led to increased teleworking and secure remote data access infrastructure.

UNIT WORKFORCE: in physical persons at 31/12/2022

| Catégories de personnel | Effectifs |
|--|------------|
| Professeurs et assimilés | 26 |
| Maîtres de conférences et assimilés | 16 |
| Directeurs de recherche et assimilés | 6 |
| Chargés de recherche et assimilés | 6 |
| Personnels d'appui à la recherche | 68 |
| Sous-total personnels permanents en activité | 122 |
| Enseignants-chercheurs et chercheurs non permanents et assimilés | 6 |
| Personnels d'appui non permanents | 69 |
| Post-doctorants | 8 |
| Doctorants | 57 |
| Sous-total personnels non permanents en activité | 140 |
| Total personnels | 262 |

DISTRIBUTION OF THE UNIT'S PERMANENTS BY EMPLOYER: in physical persons at 31/12/2022. Non-tutorship employers are grouped under the heading "others".

| Nom de l'employeur | EC | C | PAR |
|-------------------------|-----------|-----------|-----------|
| SORBONNE UNIVERSITÉ | 38 | 0 | 19 |
| AUTRES | 4 | 0 | 29 |
| INSERM | 0 | 12 | 18 |
| Total personnels | 42 | 12 | 66 |

GLOBAL ASSESSMENT

The IPLESP research unit is one of the high-level French public health research centers, whose activities have significantly advanced knowledge and health during the 2017-2022 mandate. There is a certain heterogeneity among the teams present, both in terms of size, the nature of the staff that compose them, and the themes addressed. Two teams with a strong clinical component (CLEPIVIR and THERAVIR), one team specializing in modeling infectious diseases (SUMO), which was very involved during the COVID-19 crisis, a team dedicated to social health inequalities (ERES) that includes a large part of the Inserm researchers of the unit, a team that joined the unit for the mandate and is dedicated to the exploitation of administrative databases for pharmacoepidemiology and research on the healthcare system (PEPITES), and finally a smaller team in environmental epidemiology focused on urban environment, which has been very active in developing innovative methods for measuring exposures to pollutants, mobility, and vital parameters (NEMESIS). This great heterogeneity constitutes a real challenge for the cohesion of the unit, a difficulty exacerbated by the location of the teams across multiple sites and by a glaring lack of space to accommodate new people (such as the hosting of an ATIP-AVENIR team, visiting professors). This last limitation is striking when compared to the resources allocated to the unit, which correspond to high expectations from the executive (modeling of epidemics, therapeutic developments and support, measuring the impact of exposures, mental health, pharmaco-epidemiology).

The measures implemented to ensure the animation and cohesion of the unit are quite convincing. However, if efforts are to be continued in the coming years, notably with the reinforcement of seminars and the creation of cross-cutting, structuring themes ('One Health', 'Causal Inference', 'Health Data', 'Participatory Research').

In summary, despite the difficulties mentioned here, the unit demonstrates remarkable activity, both in terms of its scientific production, transfer to society, and the measures implemented to ensure the cohesion and animation of the teams.

DETAILED EVALUATION OF THE UNIT

A - CONSIDERATION OF THE RECOMMENDATIONS IN THE PREVIOUS REPORT

The consideration of the recommendations from the previous Hcéres report is quite convincing. Firstly, regarding the scientific valorisation through academic publications, a special effort has been made, notably with a significant number of publications in top-tier journals (Nature, Lancet, etc.). These efforts are primarily focused on teams working on the most clinical themes (THERAVIR, CLEPIVIR), but also the SUMO team.

The visiting committee also noted a starting effort towards participatory research, an effort that deserves to be continued as the implementation of research activities involving patient and societal engagement can only be sustained over the long term.

The previous report also mentioned a lower than expected number of doctoral students supervised. This issue appears to have received special attention during this contract period since 48 students completed their theses during this time, out of 57 students supervised as of December 2022, an increase of over 50% compared to December 2017. Concurrently, the number of researchers holding an HDR (Habilitation à Diriger des Recherches) and who have supervised doctoral students has increased by more than 20%.

Comments regarding the life of the unit were also taken into account. Two general assemblies were organized in 2019 and 2022. Each year, doctoral students are invited to present their work to the unit during a seminar. More recently, in 2022, an initiative was put in place to facilitate the integration of new researchers. Regarding the unit's life, the COVID-19 crisis has had the virtue of strengthening the cohesion of teams and researchers, as a large number of them initiated or were involved in numerous projects on this topic, leading to publications shared by several teams of the unit.

Regarding recommendations on scientific strategy and project, the unit has established cross-functional working groups that have had varying degrees of success, some having significant activity (health economics, sensors, migrants), others less or not significant (biostatistics and medical administrative data).

B - EVALUATION AREAS

EVALUATION AREA 1: PROFILE, RESOURCES AND ORGANISATION OF THE UNIT

Assessment on the scientific objectives of the unit

The unit demonstrates outstanding capability in addressing a wide range of public health issues with innovative epidemiological methods, a commitment to evidence-based, observational approaches, and a focus on digital health trends, while also effectively establishing additional objectives in response to the COVID crisis.

Assessment on the unit's resources

The unit exhibits excellent financial stability, resource allocation, and infrastructure development, positioning it well for future growth and research excellence. However, challenges such as administrative burdens, space constraints, and the complexity of managing a diverse, multi-location setup present significant risks that need careful management.

Assessment on the functioning of the unit

The unit demonstrates excellent compliance with the rules and directives of its supervisory authorities, showcasing strong procedural frameworks, effective data management, and commitment to safety and ethical practices. However, the complexities of adhering to a dynamic regulatory environment and managing a digital-centric workplace present ongoing challenges that require diligent oversight.

1/ The unit has set itself relevant scientific objectives.

Strengths and possibilities linked to the context

The unit's focus on a diversified range of public health issues, including the use of innovative methods in epidemiology, aligns well with contemporary challenges in global health. The emphasis on, innovative methodology and medico-administrative data analysis highlights a comprehensive and modern approach to public health research.

The unit's vision emphasizes a commitment to evidence-based approaches and observational methods, crucial for advancing knowledge in public health and epidemiology with a focus on open science and digital health that aligns with contemporary trends in public health research.

All components of the unit have also been able to establish additional scientific objectives related to the COVID-19 crisis with relevance and responsiveness. In doing so, they have secured a prominent role in France and a leading position in Europe.

Weaknesses and risks linked to the context

The structure, while advantageous for fostering broad research themes, may limit collaboration among teams within the unit, potentially leading to siloed research efforts.

The unit's objectives and success are heavily reliant on external partnerships, funding, and the evolving landscape of public health challenges, which might impact its agility and responsiveness to new research opportunities.

2/ The unit has resources that are suited to its activity profile and research environment and mobilises them.

Strengths and possibilities linked to the context

With a substantial annual income from research contracts and recurrent budgets from Inserm and Sorbonne University, the unit is financially robust, allowing it to maintain and advance its research activities effectively. Equitable distribution of funds among teams and the allocation for support of master students demonstrate a balanced and supportive research environment. The unit's commitment to high-level computer systems and technical spaces, such as server rooms, reflects its dedication to maintaining cutting-edge research facilities.

The reorganization of premises, particularly the project to regroup teams on the same site, represents a strategic use of space that fosters collaboration and efficiency. The financing obtained for renovation and the additional space anticipated by 2024 will greatly enhance the research environment and capacity.

The emphasis on IT and administrative support underscores the unit's understanding of the importance of these roles in facilitating research.

Weaknesses and risks linked to the context

The management of a large budget in a complex administrative environment with several supervisory bodies with varying rules poses a significant challenge and leads to inefficiencies.

Current space limitations restrict recruitment capabilities and impede growth.

The transition to a new IT system, while beneficial, carries inherent risks of technical issues and potential downtimes. Adhering to complex regulations, particularly in IT security and data protection, can be resource-intensive.

Having teams scattered across two locations could hinder intra-unit communication and collaboration.

3/ The unit's practices comply with the rules and directives laid down by its supervisory bodies in terms of human resources management, safety, environment, ethical protocols and protection of data and scientific heritage.

Strengths and possibilities linked to the context

The unit's adherence to a comprehensive set of rules and directives from supervisory bodies, including Inserm, Sorbonne University and APHP, underscores a strong compliance framework.

The establishment of clear procedures for welcoming and integrating new staff, as well as managing departures, enhances organizational efficiency and employee experience.

The implementation of an IT charter and organized data backup systems with historical records ensures the secure and efficient handling of digital resources.

The unit's commitment to safety, particularly through the evaluation and prevention of psycho-social risks and adherence to continuity plans during crises like COVID, demonstrates a proactive approach to health and safety.

The availability of an intranet with updated documents and clear guidelines on publishing practices, including caution against predatory journals, promotes transparency and informed decision-making.

Weaknesses and risks linked to the context

The complexity of adhering to numerous and potentially changing regulations from multiple supervisory bodies can be challenging and resource-intensive.

While telework is organized, managing it effectively across diverse teams can be challenging, potentially impacting productivity and communication.

The rapidly evolving nature of regulations, especially in areas like data protection and ethical protocols, requires constant vigilance and adaptability.

A certain degree of heterogeneity between teams in the remuneration and management of contractual staff, especially postdoctoral fellows, is a source of frustration and loss of cohesion for the unit.

EVALUATION AREA 2: ATTRACTIVENESS

Assessment on the attractiveness of the unit

The unit possesses outstanding scientific reputation and technological capabilities, bolstered by successful grant acquisitions and a strong support system for staff integration. However, it faces challenges such as space limitations and recruitment difficulties, which, along with the impact of COVID-19, pose risks to maintaining its exceptional standards and growth prospects.

- 1/ The unit has an attractive scientific reputation and is part of the European research area.*
- 2/ The unit is attractive because for the quality of its staff support policy.*
- 3/ The unit is attractive through its success in competitive calls for projects.*
- 4/ The unit is attractive for the quality of its major equipment and technical skills.*

Strengths and possibilities linked to the context for the four references above

1/ The unit is attractive for its scientific influence and is part of the European research area.

The unit's significant scientific influence and reputation, highlighted by prestigious awards and active involvement in COVID-19 research, demonstrate its strong position in the European research landscape.

2/ The unit is attractive by the quality of its staff support policy.

Despite space limitations, the unit's commitment to a supportive staff hosting policy, including a well-structured integration process and provision of welcome budgets for new recruits, underscores its dedication to fostering a nurturing research environment.

3/ The unit is attractive by the recognition of its success in competitive calls for projects.

The unit's success in competitive grant acquisition reflects its robust research capabilities and attractiveness, with a high percentage of its income derived from these grants, showcasing its competitiveness and appeal in the research community.

4/ The unit is attractive by the quality of its equipment and technical skills.

The unit's emphasis on high-quality equipment and technological skills, particularly in IT infrastructure and data management, signifies a strong foundation for advanced research, enhancing its appeal and operational efficiency.

The unit boasts a prestigious scientific reputation, evidenced by significant awards and recognitions, contributing greatly to its attractiveness (Inserm Grand Prize for Dominique Costagliola in 2020 and by the Joliot-Curie Commitment Prize for Vittoria Colizza in 2021).

The team's success in securing grants through competitive calls (H2020, ANR, ERC), accounting for a major portion of the annual income, demonstrates the unit's research excellence and appeal.

The commitment to renewing computing equipment and centralizing IT systems ensures efficient data management and research operations, enhancing the unit's technological edge. The unit's establishment of two IT architectures, compliant with national health data system security guidelines and encompassing both a closed system for SNDS matched data and secure remote access to SNDS for IPLESP members, is a noteworthy strength.

During the contract period, the unit was able to recruit three full-time researchers and eight university researchers-physicians. Well-defined procedures for welcoming and integrating new staff, along with a dedicated welcome budget, create a supportive environment for researchers.

The creation of a Master's degree in Public Health at Sorbonne University in 2019 by IPLESP's university-researchers significantly enhanced the unit's attractiveness, offering diverse courses and partnerships, and involving extensive participation from the unit's researchers and physicians in teaching and student supervision.

Weaknesses and risks linked to the context for the four references above

The lack of available space limits the ability to host visiting researchers or post-doctorants, impacting the unit's growth and collaboration potential. Limited opportunities for permanent staff recruitment and unattractive salary scales for contract staff pose significant challenges in attracting and retaining high-level researchers and operational staff.

Heavy reliance on grants and external funding sources could pose financial risks in fluctuating economic conditions.

EVALUATION AREA 3: SCIENTIFIC PRODUCTION

Assessment on the scientific production of the unit

The unit's scientific production is outstanding, characterized by a high volume of influential publications in very good journals and a strong commitment to open science, interdisciplinary collaboration, and ethical standards. However, it faces challenges in balancing the emphasis on high-impact publications with the maintenance of diverse and intrinsic scientific contributions.

1/ The scientific production of the unit meets quality criteria.

2/ The unit's scientific production is proportionate to its research potential and properly shared out between its personnel.

3/ The scientific production of the unit complies with the principles of research integrity, ethics and open science. It complies with the directives applicable in this field.

Strengths and possibilities linked to the context for the three references above

1/ The scientific production of the unit meets quality criteria.

The unit's impressive publication record, with a significant presence in high-impact journals and a strong Relative Citation Ratio, reflects its outstanding research impact and quality in the scientific community.

2/ The scientific output of the unit is proportionate to its research potential and properly distributed among its staff.

The adherence to ICMJE rules and the emphasis on inclusive authorship for trainees, engineers, and technicians demonstrate the unit's commitment to equitable recognition and development of its diverse research personal.

3/ The unit's compliance with open science principles and commitment to scientific integrity and ethics, including the deposit of publications in open archives, showcases its dedication to responsible and accessible scientific communication.

The unit demonstrates a strong scientific output: 2183 original articles published between 2017-2022, including a significant number (843) as lead author, a significant number being published in prestigious journals: 21 in the Nature group (one in Nature), sixteen in the Lancet group (3 in Lancet), seven in the JAMA group. The Relative Citation Ratio is high (2.38), indicating a strong influence and quality of publications, surpassing the median influence of NIH-funded papers.

The co-authorship of 136 (6%) articles by members of different teams reflects a moderate but significant collaborative and interdisciplinary research environment.

With 76% of papers available on open-access archives, the unit shows a strong commitment to open science, enhancing the visibility and accessibility of its research.

Weaknesses and risks linked to the context for the three references above

No specific weak point in this area.

EVALUATION AREA 4: CONTRIBUTION OF RESEARCH ACTIVITIES TO SOCIETY

Assessment on the inclusion of the unit's research in society

IPLESP stands out for its outstanding contributions to society through diverse non-academic interactions, industry collaborations, and active public engagement, underpinned by strong ethical communication standards. In particular, all components of the unit have been able to establish additional scientific objectives related to the COVID-19 crisis with relevance and responsiveness.

- 1/ The unit stands out for the quality and the amount of its interactions with the non-academic world.*
- 2/ The unit develops products for the cultural, economic and social world.*
- 3/ The unit shares its knowledge with the general public and takes part in debates in society.*

Strengths and possibilities linked to the context for the three references above

1/ Unity is distinguished by the quality and quantity of its interactions with the non-academic world.

The unit excels in its non-academic interactions, making significant contributions to French institutions and engaging effectively with the media and social actors, especially during the COVID-19 pandemic, reflecting its outstanding societal impact.

2/ The unit develops products for the cultural, economic and social world.

Through its involvement in communicating research results and developing publicly accessible tools and software, the unit demonstrates a strong commitment to contributing products of cultural, economic, and social relevance.

3/ The unit shares its knowledge with the general public and participates in social debates.

The unit's active role in public knowledge sharing and participation in societal debates, particularly during the COVID-19 crisis, showcases its dedication to ethical and impactful communication with the general public.

The unit's involvement with French institutions, media, and social actors, especially during the COVID-19 pandemic, showcases its ability to contribute significantly to societal decision-making processes.

This has led for example to the establishment of an ad-hoc platform within the team, named SU-MOC 'Sorbonne University - Modelling Outbreak Center', funded to contribute to the renovation of the faculty building where it will be housed, and involving ANRS-MIE, Sorbonne University, in order to secure and enhance this emergency response capacity.

Partnerships with pharmaceutical companies and startups for clinical studies and software development indicate industry ties and potential for economic impact.

Active participation in public discussions and media, along with development of public-friendly tools like software and websites, highlights the unit's commitment to making research accessible to broader audiences. Adherence to ethical and integrity standards in public communication (coordinated by Florence Tubach), overseen by institutional bodies, ensures responsible sharing of knowledge. Even though it is not the core activity of the unit, some teams, particularly the NEMESIS team, develop software (like ECO Emo Tracker), for which industrialization is being considered.

Weaknesses and risks linked to the context for the three references above

The current limitations in human resources dedicated to public communication and interaction with non-academic sectors may hinder the unit's ability to effectively disseminate knowledge.

ANALYSIS OF THE UNIT'S TRAJECTORY

The unit's ambition for the 2025-2029 period reflects a forward-thinking and adaptive approach. The emphasis on addressing challenges posed by the digital revolution, big data, climate crisis, global changes, and social inequalities in health indicates a comprehensive understanding of the current and future landscape of public health research.

The ambition to focus research around key themes such as 'One Health', 'Causal Inference', 'Health Data', and particularly 'Participatory Research', is commendable. The implementation of 'Participatory Research' is notably challenging, given its complex nature which necessitates the real and sustained involvement of patients. Therefore, while promoting synergies between teams on these themes suggests a unified and integrated research approach, it is important to acknowledge that the successful realization of participatory research goals will likely be a long-term endeavor.

The unit's commitment to open science, scientific integrity, and research ethics is praiseworthy. This aligns with global shifts towards more transparent, accessible, and ethically sound research practices. Their focus on sustainable development and fighting discrimination further enhances their social responsibility and relevance. The self-evaluation identifies key areas of concern, such as the attractiveness to young researchers and post-doctoral students, lack of international visibility for some teams, and the need for more robust collaboration between teams. The anticipated threats, including space limitations for senior researchers or visiting professors, the attractiveness of operational contract jobs, increasing administrative burdens, and data regulation issues, are significant. To effectively address these challenges, strategic planning and resource allocation are essential. This should include not only rehabilitating existing research spaces but also investing in the creation of additional spaces. The influx of external funding is a testament to the recognized needs and potential of the research; however, it also underscores the necessity to expand physical capacity to accommodate and actualize these research endeavors effectively.

The five strategic objectives outlined (establishing the Inserm Chair in Causal Inference, recruiting young researchers and post-doctorants, installing the emerging diseases modelling platform, developing the visual identity of IPLESP, and encouraging the creation of emerging teams) are clear and actionable.

The operational and thematic reorganizations, such as the focus on internal and external communication, participatory research, centralization of IT resources and administrative services, and restructuring of research themes, are strategic moves. These reorganizations aim to enhance efficiency, collaboration, and thematic clarity. The thematic refocusing on "disease-oriented" issues while organizing potential synergies between teams is a smart approach to streamline research efforts.

Plans for increasing interactions between unit actors, such as the centralization of management activities and setting up a directory of competences/skills, are positive steps towards fostering a collaborative environment. The establishment of a "Society Interface Committee" and the focus on participatory research actions reflect an inclusive approach to research and decision-making. The continuation of various scientific events and seminars will aid in maintaining a vibrant research culture.

Overall, the unit's trajectory for 2025-2029 is ambitious and well-structured, with a clear focus on emerging and relevant themes in public health research. The commitment to open science, ethical research practices, and collaboration both within the unit and with the broader community is commendable. However, the unit must address the identified weaknesses, particularly in attracting young talent and international visibility. The anticipated structural and functional reorganizations show promise in addressing these challenges and enhancing the unit's research capacity and impact. The proactive approach to creating a common culture and identity, as suggested by the SAB, will be crucial in fostering synergies between teams and ensuring the unit's success in its upcoming contract period.

RECOMMENDATIONS TO THE UNIT

Recommendations regarding the Evaluation Area 1: Profile, Resources and Organisation of the Unit

Implement solutions to overcome space limitations, such as optimizing existing facilities and also seeking new premises options from supervisory bodies.

Strengthen the harmonization of hosting and remuneration conditions for contractual staff.

Engage a dialogue with supervisory bodies to facilitate the interaction with the administrative support (in particular Inserm) and hence reduce the administrative burden.

Continue to encourage closer collaboration between teams to overcome segmentation and enhance synergy within the unit.

The unit should establish a system to facilitate the reporting of queries and suggestions from non-permanent staff to their representatives participating in the decision board. The objective would be to enhance the management of non-permanent human resources within the unit and the teams.

The unit has defined four strategic axes that are particularly relevant and widely transversal to the teams (One Health, Causal Inference, Health Data, and Participatory Research). The unit should consider how to animate these axes at the unit and team levels in order to develop a coherent narrative and make them operational.

Recommendations regarding the Evaluation Area 2: Attractiveness

Find solutions to space limitations to better accommodate visiting researchers and post-doctoral fellows.

Implement strategies to increase the unit's presence on the international stage, particularly through collaborations and publications.

Recommendations regarding Evaluation Area 3: Scientific Production

Continue to promote collaborations between different teams within the unit to enrich research and explore new perspectives.

Recommendations regarding Evaluation Area 4: Contribution of Research Activities to Society

Develop strategies for effective communication with the general public and non-academic stakeholders.

Strengthen the encouragement of participatory research approaches, involving patients and the public in the design and implementation of research projects.

TEAM-BY-TEAM OR THEME ASSESSMENT

Team 1: SUMO
Name of the supervisor: M. Pierre-Yves Boëlle

THEMES OF THE TEAM

The main themes of the SUMO team (Surveillance and Modelling of Communicable Diseases) over the evaluated period were:

- The development of integrated information systems as well as accompanying data-analysis methods and models to assist decision-making in the control of communicable diseases, including the adaption of existing surveillance systems to tackle emerging issues such as the monitoring of COVID-19 outbreaks in France;
- The leveraging of Sentinelles data (collected from the Sentinelles network gathering around 1,000 French general practitioners), occasionally requiring the development of new statistical methods, to provide relevant epidemiological signals to health authorities, and the coupling of these data with other sources of information to improve the characterization of various diseases and health issues in the general population;
- The development of expertise, tools and models to analyze the risk of importation of emerging diseases, as illustrated for COVID-19, as well as the modeling of epidemic spread at different scales and in various settings using network formalism and mobility data;
- The use of data from multiple sources to better characterize and estimate the drivers, the prevalence and the effect of healthcare practices for vector-borne diseases, hospital-related infections and HIV;
- The development of diagnosis based on mass spectrometry for fungal and vector-borne diseases;
- The characterization of the epidemiology of COVID-19, with efforts directed towards understanding its global and local spread, detecting cases in the general population with new tools for surveillance and data analysis, identifying its drivers, evaluating intervention strategies (tracing, isolation, vaccination...), characterizing hospital stays, establishing and analyzing cohort studies...

The active and intense engagement of the team in COVID-19 studies was clearly associated with the circumstances prevailing during the evaluated period, namely, the emergence of this disease in 2019-2020 and the subsequent pandemics. This involvement, however, was in alignment with the team's longstanding commitment to operating at the intersection of surveillance, modeling, communicable diseases, and public health.

CONSIDERATION OF THE RECOMMENDATIONS OF THE PREVIOUS REPORT

The recommendation to focus on the most promising studies was followed due to the circumstances prevailing during the evaluated period. Indeed, the team significantly re-orientated its workforce towards COVID-19 studies. The team also highlighted in the self-evaluation report other topics deserving investigation, such as Rift Valley fever and HIV.

The recommendation to publish a few papers each year in high profile journals was followed to a certain extent, especially thanks to the high quality and timely work dealing with COVID-19 (e.g., Pullano et al., 2021, Nature; Pullano et al., 2020, Lancet Digit Health), but also concerning other topics (Métras et al., 2020, PNAS; Debin et al., 2022, Eurosurveillance).

The team worked to make data and codes accessible throughout the evaluation period, aligning with the current data-sharing guidelines advocated by numerous peer-reviewed journals. To enhance visibility, dedicated websites were created for the most prominent data sets and codes. Nevertheless, the team harbors some reservations regarding the release of codes related to very specific model simulations and data analyses that are highly specialized and less likely to be reusable by others. Making this notice, it is essential to consider that, aside from reusability, promoting reproducibility constitutes another crucial objective of open codes (even if reusability is unlikely).

Fostering the collaboration between the subgroups of the team was recommended. From this perspective, the team has developed the use of digital remote tools to enhance intra-team collaboration, and produced 25 articles (among 338) co-authored by members of two sub-groups or more. The team also identifies the topic of vector-borne diseases as an important theme for promoting the collaboration between the subgroups, especially thanks to the recent recruitment of new permanent staffs.

Concerning the scientific strategy, the team was recommended to tackle the whole chain from surveillance to public-health decision-making, and to extend its collaboration network, including teams abroad with positioning analogous to SUMO. The COVID-19 context was identified by the team as a catalyst for going in these directions.

Concerning the international collaborations, the team pointed out several links recently strengthened with teams in the US, the UK and Italy.

WORKFORCE OF THE TEAM: in physical persons at 31/12/2022

| Catégories de personnel | Effectifs |
|--|-----------|
| Professeurs et assimilés | 7 |
| Maîtres de conférences et assimilés | 5 |
| Directeurs de recherche et assimilés | 1 |
| Chargés de recherche et assimilés | 2 |
| Personnels d'appui à la recherche | 8 |
| Sous-total personnels permanents en activité | 23 |
| Enseignants-chercheurs et chercheurs non permanents et assimilés | 0 |
| Personnels d'appui non permanents | 21 |
| Post-doctorants | 1 |
| Doctorants | 20 |
| Sous-total personnels non permanents en activité | 42 |
| Total personnels | 65 |

EVALUATION

Overall assessment of the team

The Surveillance and Modelling of Communicable Diseases (SUMO) team was renewed in 2019 within the IPLESP institute, with the aim of bringing together researchers specialized in surveillance and modelling and providing real added value in terms of data analysis, new-knowledge acquisition, risk prediction, prevention, responsiveness... Since its establishment, SUMO has developed a unique and effective approach that proved its worth during the COVID-19 crisis. The team fully achieved its initial objectives.

SUMO scientists have an outstanding publication activity in international peer-reviewed journals. SUMO also hosts many scientific databases, web and software platforms (one of the most visible being the one associated with the Sentinelles network), thus promoting the dissemination of scientific knowledge within the academic communities and the society (i.e., open science).

During the evaluated period, the research themes have been strongly - but not exclusively - focused on COVID-19 (the team contributed to 64 scientific articles on this single topic). The strong involvement of the team on COVID-19 studies has probably hampered scientific production, collaboration, and visibility, on which the team can capitalize for its other activities. At the team level, research transfer, promotion and dissemination to the public, health organizations and political decision-makers are exceptional.

Strengths and possibilities linked to the context

The team has outstanding publication records, with 338 original articles, mainly in medical specialty journals in infectious diseases and epidemiology, among which 119 have a member of SUMO as first or last author. Numerous articles were published in peer-reviewed journal with an excellent or exceptional level (e.g., Nature, Lancet, PNAS, Nature Medicine).

Moreover, the team is characterized by the following attributes, which point out its robust foundation and significant opportunities for its future:

- The complementary association within the team of field epidemiologists working on surveillance and theoretical epidemiologists working on modelling.
- Strong links with public-health bodies corresponding to both longstanding interactions and more episodic interactions depending on the sanitary circumstances (Santé Publique France, Haute Autorité de Santé, CPIAS-APHP...).

- The sustainability of the involvement of the team in the Sentinelles network and its capacity to make the network evolve with its partners, in the aim of tackling new health issues.
- The co-lead of the “concerted action” on modeling of infectious diseases founded by ANRS-MIE allowing to fostering collaborations between modeling teams in France and highlighting the leadership position of SUMO on one of its core topics.
- The creation in 2023 of the Sorbonne University – Modeling Outbreak Center (SU-MOC) allowing to consolidating the resources devoted to the analysis of infectious diseases dynamics and strengthening the response capacity to emerging infectious diseases.
- The development within the team of good practices in terms of Open Science (e.g., use of preprint servers, sharing of codes and data).
- The ability of the team to communicate its expertise and results in media in the aim of informing the general public.
- The academic and public recognition of the team, which was notably exemplified by the distinctions bestowed upon Vittoria Colizza.
- The timely strengthening of the team, thanks to recent recruitments of permanent researchers, on One Health, zoonoses and climate change.
- The high success of the team in competitive calls for funding projects, including European, ANRS and PhD projects.
- The excellent attractiveness of the team, as exemplified by the recruitment of researchers who were carrying out their research abroad before working at IPLESP.

Weaknesses and risks linked to the context

The dispersion of team members across various Parisian hospitals (Saint-Antoine, Pitié-Salpêtrière, Broussais) and beyond Paris (some team members engaged in the Sentinelles network) is perceived as a potential risk. Despite the team's dedicated efforts to facilitate scientific interactions through digital remote tools, this dispersion could be seen as an impediment to establishing a cohesive research agenda and fostering new strategic collaborations on emerging research topics.

Despite the recent increase in available space at the Saint-Antoine site, facilitated by the funding for the establishment of the Sorbonne University – Modeling Outbreak Center, the team is still constrained by a persistent shortage of space. This limitation adversely affects both the team's life and the recruitment of new members.

The present availability of numerous funding opportunities in France and the success rate of the team at these calls seem to lessen the propensity of the team to engage in the coordination of international research projects and networks (even if the team is involved as participant in several EU projects and has several international collaboration) and, subsequently, may generate the risk of limiting the visibility of the team and its influence at the international level.

Analysis of the team's trajectory

The trajectory of the team is based on robust and exceptional scientific foundations, high level senior and junior researchers, relevant partnerships, a remarkable academic and public recognition, and impressive publication records. The team demonstrated its effective and efficient response capacity to tackle emerging health issues, being able to simultaneously produce knowledge (the team has contributed to 64 scientific articles on COVID-19), to assist health authorities in decision-making, and to disseminate its expertise and results in the general public. In addition, the team is definitely involved in the movement for open science and data sharing by making most of collected data, developed codes and written documents freely available for the academic communities and the society. If the 2017-2022 report for the team is presented as a list of items (all relevant) without a clear structure, the team made some effort to draw a more structured project for the future, grounded on its longstanding forces (surveillance, Sentinelles network, response capacity, interaction with health authorities and health organizations...), and several recent initiatives (establishment of SU-MOC, recruitments of permanent researcher in One Health, zoonoses and climate change...). Thus, the team proposes a project made of two interconnected axes:

1) the “Modelling/Analytics” axis dealing with 1.1) the COVID-19 pandemic, 1.2) the Monkeypox and other sexually transmitted diseases, 1.3) the preparedness to new diseases and pandemics, 1.4) the behavioral response and adaptation, and 1.5) One health issues including vector borne diseases, climate change and zoonoses;

2) the “surveillance” axis dealing with 2.1) artificial intelligence for epidemic prediction, 2.2) the adaption of surveillance tools to the needs identified in the case of emerging diseases such as COVID-19, and 2.3) disease surveillance in a post-COVID19 period.

One of the timely research perspectives of SUMO deals with exploring whether artificial intelligence (AI) can assist epidemic modeling based on diverse data at various resolution, using approaches such as transfer learning to produce epidemic scenarios and physics-informed models to integrate knowledge and data within an AI framework.

The context in which the project of SUMO will be developed is favorable both at the national and international levels. As an illustration, the team co-leads the ANRS-MIE “concerted action” for modeling infectious diseases

with an analogue team at Institut Pasteur, which will strengthen its leadership at the national level. Moreover, its scientific positioning and international recognition facilitate the construction of new international collaborations and the involvement in European projects. Finally, the research agenda proposed by SUMO is in line with the strategic plans of INSERM (e.g., Open Science) and Sorbonne University (e.g., AI).

RECOMMENDATIONS TO THE TEAM

SUMO is positioned throughout the chain from surveillance to public-health decision-making. It is also involved in the anticipation dimension (to which the “Disease X and pandemic preparedness” topic especially contributes as well as some components mentioned in other topics of the scientific project at the team level), and this very relevant dimension (at both the scientific and societal levels) may be better highlighted in the description of the team. To continue with display-related issues, the team could also benefit from a clearer description of the interconnection of its research axes: the Surveillance axis inherently includes models, to a lesser extent the Modelling/Analytics axis includes the enhancement of surveillance, and this is such because anticipation, surveillance, modeling, decision... are actually distributed over loops rather than over a linear chain. The scientific project might be structured throughout these loops formed by generic (and sustainable) dimensions, and each case study handled by the team may arise at several levels of the loops (like COVID-19 does throughout the two axes of the proposed scientific project).

The SUMO team is positioned in the four strategic axes defined at the unit level (One Health; Causal inference; Health data; Participatory research), based on the unit self-assessment report. The team should better highlight how the four strategic axes defined at the unit level percolate in the strategy of the team and how the team contributes to the dynamics of these axes at the unit level.

One Health, zoonoses, and climate change are inherently multidisciplinary topics, which may necessitate that the researchers involved on these subjects collaborate with scientists beyond the scientific boundaries of the IPLESP unit, of the SUMO team and of its usual collaborators. The team should elaborate a strategy for engaging in consistent and relevant collaborations outside its field of expertise on these topics, including a larger implication in the PEPR PREZODE and its analogues at the international level. This recommendation also stands for other strategic topics such as artificial intelligence, which will be mobilized by the team in the near future, and participatory science.

Considering the dispersion of the team, both in terms of geography and applied themes, and the new scientific challenges the team aims to address, the monthly meeting should serve not only for scientific presentations but also, periodically, for establishing/maintaining a cohesive research agenda, fostering new strategic collaborations on emerging research topics, and enhancing the international visibility of the team.

Team 2: CLEPIVIR
 Name of the supervisor: M. Fabrice Carrat

THEMES OF THE TEAM

The clinical epidemiology of chronic viral diseases (CLEPIVIR) team was renewed in 2019. The primary objective of the team is to study therapeutic strategies and prognostic of patients leaving with chronic viral infection especially HIV (mainly using the FHDH-ANRS CO4 cohort), chronic hepatitis virus infection (mainly using the ANRS CO22 Hepather cohort) and interaction between HIV infection and viral hepatitis. In addition, this team developpes methods to estimate more adequately treatment effects in observational studies. In the context of COVID-19, a strong mobilization of the CLEPIVIR team conduct to the implementation and coordination of observational studies on COVID-19 and SARS-CoV-2 infection (SAPRIS project and ANRS-COCOPREV study) to study incidence, risk factors, social and behavioral effect of the pandemic and impact of public policies.

CONSIDERATION OF THE RECOMMENDATIONS OF THE PREVIOUS REPORT

CLEPIVIR team had mainly respond to comments of the previous Hcéres report. They increased the number of PhD students and post-doctoral fellows. However, considering the quality of this team, grants obtained and the number of habilitations to direct research, the number of PhD and post-doctoral fellows can be increased. Concerning cost effectiveness analysis, they conducted several studies during the period with a new team member (Gilles Heilblum, Inserm full time researcher) specialized in cost-effectiveness study. All team members will have joined the same place in Saint-Antoine in 2024. Meetings between PhD students of different teams have increased since 2020. The interaction between teams have also increased notably thorough COVID-19 studies however there is a need to increase interaction especially with ERES team on social inequality and chronic viral diseases and on participatory research.

WORKFORCE OF THE TEAM: in physical persons at 31/12/2022

| Catégories de personnel | Effectifs |
|--|-----------|
| Professeurs et assimilés | 2 |
| Maîtres de conférences et assimilés | 4 |
| Directeurs de recherche et assimilés | 0 |
| Chargés de recherche et assimilés | 1 |
| Personnels d'appui à la recherche | 12 |
| Sous-total personnels permanents en activité | 19 |
| Enseignants-chercheurs et chercheurs non permanents et assimilés | 1 |
| Personnels d'appui non permanents | 8 |
| Post-doctorants | 1 |
| Doctorants | 9 |
| Sous-total personnels non permanents en activité | 19 |
| Total personnels | 38 |

EVALUATION

Overall assessment of the team

CLEPIVIR team has an outstanding scientific production with a high international recognition in their field. Their scientific production help stakeholders including policy makers in their decisions to improve population health. Although COVID-19 is not primarily a chronic viral disease, CLEPIVIR team has timely widely been involved at national level in epidemiological studies with a remarkable production.

Strengths and possibilities linked to the context

CLEPILVIR team has a central position in France on this research area with an outstanding scientific production. The CLEPILVIR team published 380 original articles over the period (including 113 as first, last or corresponding author). They published as leader in major general journals (Lancet, Lancet Regional Health Europe, JAMA Network Open), but also in infectious diseases (Lancet HIV, Clin Infect Dis for example) hepato-gastroenterology (Lancet Gastroenterol Hepatol, J Hepatol...) hematology (Blood, Leukemia), and epidemiology (Int J Epidemiol, Eur J Epidemiol, J Clin Epidemiol, Epidemiol Infect) journals. Seven papers are highly-cited in the WoS for the period. They used large ongoing cohorts (218,250 patients from 173 hospitals for the FHDH cohort and 21,277 patients with 940,000 biological sample for the ANRS CO22 HEPATHER cohort for example) with for some of them linkage with the National Health Data System (SNDS). The team has strong biostatistical methodological skills to develop methods to better estimate therapeutic strategy and prognostic of chronic viral diseases. The inclusion of cost-effectiveness study and the arrival of a full-time researcher with specialization in causal methodology are also important strengths. In addition, the proven ability of the CLEPILVIR team to timely implement and coordinate observational studies on COVID-19 and SARS-CoV-2 infection that help public policies need also to be cited. The portfolio very well underlined these strengths on the 5 axes (HIV, viral hepatitis, HIV/HBV infections, methodological advance, and COVID-19).

Weaknesses and risks linked to the context

Although the scientific production is outstanding, CLEPILVIR team need to increase publications in leading generalist journal. In addition, if the number of the PhD students and post-doctoral fellows increased during the 2017-2022 period there is a need to pursue this effort considering the number of HDR and the scientific quality of the team. Even if the CLEPILVIR team has obtained important national grants as leaders and even if they had numerous international collaborations, their international and/or European dimensions could be enhanced. Although, the team increased interactions with other teams from IPLESP, the effort could be pursued, especially with ERES both on social determinant and health inequality in chronic disease and in participatory science to include patients earlier in the research process. The scientific strategy for the next contract is indeed addressing most of these weaknesses.

Analysis of the team's trajectory

The scientific strategy of CLEPILVIR team is excellent and aim to study the long-term impact of chronic viral infections and their therapeutic management and on assessing public health burden. Especially they will increase the uses of big data by extending uses of SNDS linked to the cohorts they coordinate and by using unstructured data from electronic medical records. They will also reinforce participatory of patients in their research. The important national and international collaborations will timely continue during the future contract.

RECOMMENDATIONS TO THE TEAM

It's important to pursue effort to increased PhD students and postdoctoral fellows' recruitments.

Considering the excellence of the team there is a need to apply for international grand as leader.

There is a need to increase the interaction with other team especially with ERES both on social determinant and health inequality in chronic disease and in participatory science to include patients earlier in the research process.

Team 3: THERAVIR
Name of the supervisor: Ms Anne-Geneviève Marcelin

THEMES OF THE TEAM

The THERAVIR team's research topics are divided into two axes or themes. The first axis concerns the human immunodeficiency virus (HIV) while the second axis aimed at improving knowledge about pathogenesis of emerging viruses such as SARS-CoV-2 and Monkeypox.

Axis 1 includes projects evaluating (i) strategies for optimizing and individualizing treatments for HIV infection with the aim of therapeutic relief, (ii) the resistance of the virus to anti-retroviral molecules with a role of the team in coordinating the upgrade of the resistance ANRS algorithm used in France and around the world for the choice and adaptation of anti-HIV treatments, (iii) the management of cancers in people living with HIV with an epidemiological, clinical and therapeutic focus on Kaposi's sarcoma caused by Human Herpes virus type 8, and (iv) measures to control the HIV/AIDS epidemic and other sexually transmitted infections through the identification of risk factors of contamination and its prevention through chemoprophylaxis pre- and post-exposure, and investigation of transmission clusters.

In addition, THERAVIR has led a second axis of work aimed at viral emergences. The team monitored the humoral immune response in immunocompromised patients, in general, and in HIV patients in particular, vaccinated against SARS-CoV-2 and carried out work evaluation of the effectiveness of new or repositioned antiviral treatments, depending on the viral variants identified. For the MKP, the projects focused on the characterization of the modes of transmission and the pathophysiology of the infection as well as the demonstration of the effectiveness of anti-smallpox vaccination against this related virus.

CONSIDERATION OF THE RECOMMENDATIONS OF THE PREVIOUS REPORT

The comments from the previous evaluation for the 2014-2018 contract were appropriately followed by the team.

Carry out mechanistic studies in addition to clinical and epidemiological studies in order to publish in journals with higher impact factors: the team has significantly increased the level of its publications by accessing high-level journals such as the Lancet or Nature Communications. Several experimental works combined with clinical and epidemiological studies have been carried out whether on HIV (anti-retroviral resistance and HIV/cancer themes) or COVID-19, through the exploration of the link between the clinical evolution of the infection, the characterization of the neutralizing properties of anti-SARS-CoV-2 antibodies and the sequencing of the viral genome (ANRS 0003S CoCoPrev study). These projects also had a structuring effect by bringing together several teams of the iPLEsp around these topics.

Increase the number of doctoral students considered too low compared to the number of researchers with HDR: the number of PhD students increased significantly during the current contract. This number, equivalent to five during the previous contract, has increased to 15 during this contract. In addition, five theses are currently in progress. Finally, five post-doctoral students were welcomed during the 2017-2022 contract.

Facilitate interactions between team members: despite the COVID-19 health crisis, new exchange times have been set up between researchers from different sites as well as between junior and senior members of the team: weekly "research coffee", monthly virology meeting and general meeting involving all team members on a monthly basis as well.

Involve doctors from non-university centers as well as representatives of patient associations in the team's work: several collaborations have been initiated with doctors outside the university hospital in terms of the use of self-screening HIV tests, for the practice of Chemsex, or during the study on the diffusion in Ile-de-France of the recombinant virus CRF94. In addition, members of the Sidaction or AIDES associations were involved in the network of experts working on the theme of Cancer and HIV, and for AIDES in the PREVENIR study on the use of pre-exposure prophylaxis in the Paris region.

Integrate expertise in big data management and the manipulation of mathematical models: this recommendation was only partially followed during the current contract during which interactions with the SUMO team have been initiated but deemed insufficient by the THERAVIR team itself. This point therefore remains among the objectives and recommendations of the future contract.

WORKFORCE OF THE TEAM: in physical persons at 31/12/2022

| Catégories de personnel | Effectifs |
|--|-----------|
| Professeurs et assimilés | 6 |
| Maîtres de conférences et assimilés | 3 |
| Directeurs de recherche et assimilés | 0 |
| Chargés de recherche et assimilés | 0 |
| Personnels d'appui à la recherche | 28 |
| Sous-total personnels permanents en activité | 37 |
| Enseignants-chercheurs et chercheurs non permanents et assimilés | 1 |
| Personnels d'appui non permanents | 22 |
| Post-doctorants | 1 |
| Doctorants | 5 |
| Sous-total personnels non permanents en activité | 29 |
| Total personnels | 66 |

EVALUATION

Overall assessment of the team

The THERAVIR team is recognized nationally and internationally for its work on HIV and now emerging viruses. In accordance with the recommendations of the previous report, its scientific production has clearly improved in both quantity and quality, and is outstanding, as is its ability to obtain funding for its research projects. The increase in the number of doctoral and post-doctoral students during the current contract and the objective of integrating medical doctors specialized in infectious diseases from the CLEPIVIR team and one or more full-time researchers is likely to further increase this excellence.

Strengths and possibilities linked to the context

The team has been working on the themes of antiviral resistance and therapeutic strategies against HIV since 2009, and for longer for some of its members. This nationally and internationally recognized expertise allows it to coordinate numerous networks of researchers and research projects, and to influence national and international recommendations (European and American) for individualized therapeutic care for patients living with HIV.

The team's scientific production is outstanding (632 articles including 516 original articles with 149 as first or last author) in major journals (Lancet, Nature communications) between 2017 and 2022. These articles are also highly cited (citation ratio of 2.44, a sharp increase from 2020 with two articles in the top 0.1% of the most cited articles in their scientific field over the last two years).

The team includes numerous engineers and technicians (19 spread between Inserm, Paris-Sorbonne University and APHP). It benefits from the significant involvement of hospital and university hospital practitioners (20 of the 21 statutory researchers in the team), both biologists and clinicians, allowing a strong link with the clinic and the patient. THERAVIR was able to attract new members providing additional expertise, particularly on herpesviruses.

The team demonstrated its ability to immediately reorient its research on emerging pathogens in a health crisis situation, whether during the Covid-19 pandemic or the epidemic in France and Europe caused by the Monkeypox virus.

The team relies on a solid infrastructure with access to biosafety level 2 and 3 laboratories for sample handling and carrying out experiments involving HIV and emerging class 2 and 3 viruses as well as negative pressure chambers for the hospitalization of infected patients. It has a Microorganism and Toxin authorization allowing it

to handle Monkeypox which could potentially be extended to any new emerging pathogen. Its members have access to numerous heavy equipment including a new high-throughput sequencing platform.

More than 13 million euros in funding were collected during the period evaluated, including 12 as project leader. The team obtained two European funding in addition to regular ANRS and industrial funding.

The link with the non-academic world, whether industrial (pharmaceutical or diagnostic) or associative, remains a strong point of the unit. The team has filed 4 patents and is awaiting funding of 8 million euros from Dassault Systèmes as part of the PRISMES project. A member of the THERAVIR team belongs to the administrative council of AIDES while members of sidaction and AIDES are part of the scientific committee of the national expert network CANCERVIH.

Finally, there are many new opportunities and challenges within the team's thematic field such as new or long-acting anti-retroviral drugs likely to significantly modify HIV management or new viral emergences that could occur at any time.

Weaknesses and risks linked to the context

No weaknesses identified.

Analysis of the team's trajectory

During the current contract, the THERAVIR team continued and consolidated its work on its historical themes consisting of the prevention and treatment of HIV infection and its consequences.

This contract has nevertheless been strongly marked by the emergence of SARS-CoV-2 and Monkeypox, which provided opportunities for scientific projects and publications that the team was able to perfectly seize.

During the 2017-2022 period, the scientific production of the team, very important on the quantitative level, experienced a significant qualitative increase over time reflected by the impact factor of the journals in which the articles were published and then their relative citation ratio.

The number of PhD students recruited was tripled by comparison with the previous contract (15 vs. 5) and new senior members came to strengthen the team, from other teams in the unit, from other units or newly recruited.

RECOMMENDATIONS TO THE TEAM

The recruitment of full-time researchers and/or additional post-doctoral students is likely to allow the team to carry out more experimental work, in particular from bio-banked samples, and mechanistic studies through the development of cellular and animal models.

Strengthening collaborations with other teams in the unit, as envisaged during the next contract with SUMO, is an objective to pursue in order to acquire new skills (big data management, mathematical modeling, etc.), new fields of study (development of a one health approach) and to strengthen the cohesion of the unit.

Team 4: NEMESIS
 Name of the supervisor: M. Basile Chaix

THEMES OF THE TEAM

The team “Neighborhood Environments and Mobility: Effects on Social health Inequalities” was created in 2015 with the start of the ERC Consolidator project of Basile Chaix and pertains to the environmental epidemiology area of research. Using improved tools for mobility data collection, the team examines how urban neighborhood environments, mobility and transport behavior influence human health.

The scientific project of the team re-labeled “Urban environments, mobility, and health in the climate change era” started to be expanded by considering more broadly the urban environment, in particular exposure to heat in cities, in the context of climate change.

CONSIDERATION OF THE RECOMMENDATIONS OF THE PREVIOUS REPORT

The main recommendation from the previous evaluation was to increase the size of the team. This recommendation has been partly fulfilled, as a permanent Engineer specialized in sensor data collection and analysis will be part of the team (Sorbonne university position starting in February 2023). The team still includes a single permanent researcher even if the team strongly supports a postdoctoral student to develop her own project to apply to a permanent researcher position or Faculty member, the sample size of the team still low in permanent researcher and/or research staff.

Regarding the other recommendations, dissemination efforts towards the society, as well as the necessity to build collaboration with clinicians, highly relevant actions have been undertaken to account for these recommendations (ex. Basil Chaix integrated the Prevention Committee of Santé Publique France, a project (H3Sensing) aiming to deliver concrete recommendations for the management of cities and neighborhoods has been launched, the socioeconomic contribution of the team is strengthened by the developed Eco Emo tracker application, and new collaboration with urbanists, physiologists and cardiologists have been set-up) and should yield to positive outcomes for the next contract.

WORKFORCE OF THE TEAM: in physical persons at 31/12/2022

| Catégories de personnel | Effectifs |
|--|-----------|
| Professeurs et assimilés | 0 |
| Maîtres de conférences et assimilés | 0 |
| Directeurs de recherche et assimilés | 1 |
| Chargés de recherche et assimilés | 0 |
| Personnels d'appui à la recherche | 0 |
| Sous-total personnels permanents en activité | 1 |
| Enseignants-chercheurs et chercheurs non permanents et assimilés | 1 |
| Personnels d'appui non permanents | 0 |
| Post-doctorants | 0 |
| Doctorants | 1 |
| Sous-total personnels non permanents en activité | 2 |
| Total personnels | 3 |

EVALUATION

Strengths and possibilities linked to the context

Overall assessment of the team

The scientific production of the NEMESIS team is excellent at the international level and have strong impact in terms of public health. The research lines cover a broad spectrum from fundamental (epidemiological) research to translation of findings into the management of mobility, public urban spaces and adaptation to climate changes. The limited size of the team, in particular in permanent researcher (n=1) remains a threat, limiting the possibility to expand the research activities, although the permanent researcher has wide international collaborations and actively participate in several national and international committees. Overall, NEMESIS is an excellent team that needs to grow.

Although the size of the team is limited (1 researcher with a permanent position), the team is clearly at the international forefront of its discipline. The team stands out for its excellent research output, with 58 articles (20 PDC) including some published in leading specialist journals (e.g. Annual Review of Public Health, Env Int, Env Research, Sc Total Env...), and for its international reputation (Basile Chaix belongs to the world top 1% of scientists in the "Public Health & Health Services" category according to the composite indicator defined by Ioannidis from Stanford University). The team maintains dynamic relations with various international institutions (Columbia University, ISER in Luxembourg, University of California in San Diego and through two large European Consortia), is member in editorial board (Epidemiology, one of the 10 Associate Editors of Health and Place) and obtained important grants (ANR, partner of H2020 ITN).

A major output of the team is the development of the Eco Emo tracker application, a novel tool aiming to administered repeated survey on smartphone, at fixed, random or GP based-signal times, and allowing a wide type of answer (selecting items, providing text, numerical values, audio sequence or picture). This application, currently in a pre-business phase, is providing scientific partnerships and economic opportunities.

The team is actively involved in research training: in the window of time considered, it has produced two PhDs with an average PhD duration of 3,5 years (which is short by international standards), both with 5 (co)-author articles, a third PhD student is currently in the team, three postdoctoral researchers were/are part in the team and the team participates to a Master 2 program.

The team has had impact on society through interaction with the press (press release in January 2022 followed by reportage in TV (BFLTV) and press articles (Libération, Le Temps, Midi Libre...), participation of expert committees (scientific council of EHESP, Institute of research in Public Health ...) and partnership with the municipality of Paris.

Weaknesses and risks linked to the context

A major threat of the team relates to its limited size, limiting the critical mass and to expand the research focus, and the limited interaction with the other teams of the research Unit (currently 2 articles were co-signed by NEMESIS and ERES members). In addition, the large number of research assistant hired in the team over the 6-year period considered was large (n=21), most of them stayed less than 2 years in the team and only the team leader was present during all the previous contract. This large turnover might have been extremely time consuming for the researcher and might have affected the duration of data collection.

Analysis of the team's trajectory

The research project is well defined, through an ambitious five-year plan. The exposures of interest will continue to relate to urban forms, and environmental exposures incurred during transport, but the team will also further focus on studying the impact of heat wave on health in urban area, which is timely given the threat related to climate change and the necessity to consider environmental factors that are intrinsically linked (e.g. green/blue spaces, air pollution, climate change). The team will continue to develop functionalities in the Eco Emo tracker, possibly through the creation of a spin-off. Although the interaction with the other teams was limited up to now, for the next research contract the team identified collaborative work with CLEPIVIR and PEPITES teams, aimed to develop secondary analyses related to health effects of climate changes, as well as domain for possible collaboration with SUMO and ESSMA teams. The team will continue to develop and maintain strong national and international collaborations.

RECOMMENDATIONS TO THE TEAM

It is recommended that the team pursues efforts to grow, in particular in terms of permanent researchers.

The research axes of the team are of high interest, but might be too wide given the current structure of the team, and part of the research are not funded yet; thus, it is recommended to prioritize research axes for the next contract. The committee encourages the team to strengthen interactions with the other teams of the unit, which are linked with the project of the postdoctoral researcher who is candidate for a permanent researcher position.

Although it is clear that the research of the team leads to societal impact, it is recommended to quantify the potential public health benefits of specific policies related to mobility, public urban spaces and adaptation to climate changes and to integrate more effectively stakeholders and population in the research program.

Team 5: PEPITES
 Name of the supervisor: Ms Florence Tubach

THEMES OF THE TEAM

The PEPITES team was created in 2019; its evaluation period is therefore shorter than the Hcéres period of interest (2017-2022). PEPITES's research focuses on pharmaco-epidemiology and the evaluation of therapeutic strategies. It combines methods specialists with clinical specialists and pharmacists with a particular interest in the evaluation of treatments in real-life situations in people with chronic inflammatory diseases and the elderly. Research will also be developed in the field of pregnancy and drug safety.

CONSIDERATION OF THE RECOMMENDATIONS OF THE PREVIOUS REPORT

The team did not exist within the IPLESP at the time the 2017 Hcéres assessment was performed and is thus not directly concerned by the comments it contained. IPLESP SAB made several comments and recommendations following its 2020 and 2023 evaluations. Effort was made regarding the team's name and the methods research. The team also increased its capacity to supervise PhD students (4 new HDRs since 2019). Overall, recommendations were followed as much as possible. Animation is conceived to compensate for the weakness constituted by the fact team researchers are spread over different locations. Research effort has been concentrated over a limited number of topics. However, within those, research can be sometimes far from pharmacoepidemiology or treatment evaluation perspectives. Finally, the team was very successful in recruiting "la relève" as suggested, with the integration of four young or mid-career researchers.

WORKFORCE OF THE TEAM: in physical persons at 31/12/2022

| Catégories de personnel | Effectifs |
|--|-----------|
| Professeurs et assimilés | 10 |
| Maîtres de conférences et assimilés | 3 |
| Directeurs de recherche et assimilés | 0 |
| Chargés de recherche et assimilés | 1 |
| Personnels d'appui à la recherche | 9 |
| Sous-total personnels permanents en activité | 23 |
| Enseignants-chercheurs et chercheurs non permanents et assimilés | 1 |
| Personnels d'appui non permanents | 1 |
| Post-doctorants | 2 |
| Doctorants | 11 |
| Sous-total personnels non permanents en activité | 15 |
| Total personnels | 38 |

EVALUATION

Overall assessment of the team

The Team has an outstanding scientific production, numerous important national grants and a consequent contribution to international projects. Its research has been relevantly refined; it is supported by a very complementary multidisciplinary expertise. Its activity is clearly rising; its research grounded on both cohorts and medico-administrative databases is an important asset now that the merging of these should be eased and the best research perspectives in the field (e.g. with machine learning) implies using clinically detailed data.

Strengths and possibilities linked to the context

The Team shows important strengths in terms of ability to obtain fundings (>6M over the last 5-year period; private; public, mostly PHRC-N), to use various datasources (including cohorts coordinated internally: ESPOIR, DESIR, APACHE, ACOSTILL; and SNDS nationwide health insurance data), to use the best existing methods in the field whenever needed (e.g. emulated trials), and to attract new researchers. The multidisciplinary and skill complementarity of the team's members as well as their important publication activity (almost 500 papers over the 2019-2022 period) are also among the main strengths of the team. These include publications in Top-10 journals and reference journals in the fields of interest (Lancet Rheumatol, Ann Rheum Dis, Intensive Care Med, Am J Respir Crit Care Med, Crit Care, Gut, J Am Geriatr Soc, J Am Med Dir Assoc, J Clin Epidemiol, Pharmacoepidemiol Drug Saf). The team publication activity indeed represents more than a third of the whole Center publications over the period while the team represents much less in terms of researcher workforce (person-time). Members of the team are involved in numerous international networks.

The team has substantially increased its ability to supervise young researchers (four more HDR over the last five years) and integrated new researchers over the period. The integration in the team of the CRAT coordinator and the opening it creates in terms of research on pregnancy and drug safety is an important opportunity. As this is a whole new field, it will need the allocation of team resources to be properly developed, which also conveys a risk. Over the period, the team has hosted on average one post-doc per year (two currently) which can be considered a good result. In the view of the number of researchers within the team (persons and person-time) and the growing dynamic, the number of hosted post-docs could be further increased. The team has also succeeded in developing interactions with society that appears balanced between private and public which is quite complicated to reach in France and should be underlined.

In terms of opportunities, the team could benefit from the Centre's visibility and that of some of the other teams that are better than their own. If relevant in their field and of strategic interest, the team members might in this perspective envision for instance to conduct part of or strengthening their research in the subpopulation of persons leaving with viral chronic infections.

Finally, the team has solid experience in the use of national health insurance databases. Improved access to these databases over the next few years should benefit the team's research, particularly if the ability to link cohort data to health insurance data is also improved.

Weaknesses and risks linked to the context

The team has refined its areas of interest (pharmacoepidemiology and evaluation of treatment strategies) with specific domains (chronic inflammatory diseases, the elderly, drugs and pregnancy) in which it can draw on expertise ranging from the clinical to the methodological. This is a very interesting strategy but that might still be narrowed within this field. The analysis of the publications indeed shows that the activities are extremely translational within the field, perhaps to an extent that is detrimental to the team in terms of visibility. If the team publication number is impressive and associated to a citation index exceeding the average, this citation index is however higher in top-10 papers where team members are not in lead position. Also, representation of team members in lead position of top-10 papers is lower than their representation above all papers they contribute to, and both these representations are lowest than that of the whole center indicating a potential for improvement. If the team presents several collaborations with other teams of the Center, this could be further increased. This development could be beneficial both for the Centre, by offering the possibility of developing expertise, and for the team, by offering the possibility of increased visibility. The visibility of the team is currently excellent at the regional level and very good at the national one, but the international visibility seems to stand more in the individual visibility of the team's members than in that of its research.

The team currently lacks full-time researcher(s) which is always a limitation as its members present often with important clinical duties. The perspective of developing close interaction and joint projects with the holder of the *Chaire Professeur Junior* dedicated to causal inference research is a very important step to compensate this current weakness.

According to the information contained in the evaluation document, the team seems to benefit from a favourable research environment. However, it is spread over two different sites (for the most part), which may have an impact on interactions between team members and with other teams and members of the Centre. Although the team has put in place an animation that tries to overcome this limit (online meetings), it would certainly be extremely valuable that all members could be gathered in the same place.

Finally, the team shows that it has a significant amount of self-financing, which is a good thing. However, obtaining substantial funding means managing major projects. In order to do this, it is necessary to have experienced permanent staff to avoid spending time and effort repeatedly recruiting engineers at short notice. Given the importance of self-financing, it would be important for the institutions to work with the team and the Centre to define a strategy that would provide a clear vision of the team's workforce for the coming years. This would potentially contribute to the team's future success in obtaining international grants, which are currently lacking.

Analysis of the team's trajectory

Over the last five years, the team has better defined its objective and field of research, gained in coherence in the field of interest of its members, increased the complementarity of the skills presented by its members and maintained its necessary level of multidisciplinary.

At the same time, it has obtained a significant number of grants from a variety of sources, including major ones, and has achieved a very high level of publication activity.

The team has also increased its capacity to supervise and welcome young researchers by integrating new researchers and obtaining four new habilitations to direct research.

The team shows an increasing trajectory in all areas, with minor limitations in terms of visibility, collaborations with other teams at the Centre and interactions with public entities.

Overall, the team's evaluation is VERY GOOD. Further strategic adjustments and institutional commitments should enable it to achieve excellence in the coming years.

RECOMMENDATIONS TO THE TEAM

- Consider narrowing further the research to be done within the field of interest (maybe too translational at the moment)
- Consider defining populations of interest matching the research themes of other Teams from the Center thus strengthening research collaborations within the Center and potentially increasing visibility
- Consider downsizing the publication activity to put more effort in reaching Top-10 journals and increase visibility
- Consider increasing interactions with public stakeholders
- Compete for international grants. Some young researchers presenting with already well-defined projects might be eligible for ERC-starting or equivalent.

Team 6: ERES
 Name of the supervisor: Ms Maria Melchior

THEMES OF THE TEAM

The ERES team conducts research around the theme of social determinants of health, with a specific expertise in the areas of cancer, mental health, and addiction. The team combines observational research based on cross-sectional surveys and longitudinal cohort studies both in general population samples and among marginalized groups across the life course. A second thread of the team is to develop and evaluate innovative interventions aiming to decrease the burden of health and improve access to care across the social gradient. The overall aim is to produce knowledge that can help health professionals and public health decision makers adapt their practices.

CONSIDERATION OF THE RECOMMENDATIONS OF THE PREVIOUS REPORT

The Hcéres report noted that despite the multidisciplinary claim of the team approach, the epidemiological and biostatistical expertise was dominant compared to other areas. The committee invited the team to take a more multidisciplinary approach to understanding the social factors involved in health inequalities by increasing interactions with social scientists and clinicians. The team has developed collaborations with clinicians and experts in social sciences and enhanced its expertise in qualitative and mixed methods design.

The SAB committee suggested to focus the research activities of the team on one specific disease area. The expertise of the team has been specifically oriented towards the areas of mental health and substance use. This orientation has been strengthened by the integration of two researchers specialized in this area during the past contract.

From our point of view, the recommendations have been fulfilled successfully.

WORKFORCE OF THE TEAM: in physical persons at 31/12/2022

| Catégories de personnel | Effectifs |
|--|-----------|
| Professeurs et assimilés | 1 |
| Maîtres de conférences et assimilés | 1 |
| Directeurs de recherche et assimilés | 4 |
| Chargés de recherche et assimilés | 2 |
| Personnels d'appui à la recherche | 5 |
| Sous-total personnels permanents en activité | 13 |
| Enseignants-chercheurs et chercheurs non permanents et assimilés | 2 |
| Personnels d'appui non permanents | 17 |
| Post-doctorants | 3 |
| Doctorants | 11 |
| Sous-total personnels non permanents en activité | 33 |
| Total personnels | 46 |

EVALUATION

Overall assessment of the team

The ERES team has a well-defined and relevant scientific domain around the social determinants of mental health and addiction, especially in children and adolescents. The team has an excellent scientific production and has been very successful in obtaining research fundings and in recruiting two Inserm/University researchers during the past contract, demonstrating its attractiveness. The researchers of the team actively participate as experts in several national committees and research steering bodies. Overall, ERES is an outstanding team with a strong potential of scientific development.

Strengths and possibilities linked to the context

Strengths

The ERES team has acquired a national recognition in the domain of the social determinants of mental health, and addiction. Its attractiveness is witnessed by its members being regularly invited to present their work in national and international congresses (25 invitations to national/international meetings, including keynote addresses at the European Society of Child and Adolescent Psychiatry and at the Collège de France). Members of the team participate in several committees selecting research projects for funding nationally (ANR, PHRC, IRESP, ANRS-MIE) and internationally (ERC, MRC, Wellcome Foundation, Belgian Science Policy Office, Dutch Cancer Society, Caixa Foundation, German Ministry of Research, Swiss National Science Foundation). Researchers of the team are members of national research steering bodies (INSERM Scientific Commission in Public Health and Health Technologies) or Hcéres expert groups evaluating research entities. The attractiveness of the team has led to the recruitment of two Inserm/University researchers during the funding period (J. Van Der Waerden in 2018 and F El Khoury in 2021). The team has been very successful in obtaining research fundings (10M euros between 2017 and 2022) from national (5 ANR, 3 ANRS, 9 INCa, 3 MILDECA) as well as from European agencies (2 H2020 projects on COVID: PERISCOPE et RESPOND, and 1 Horizon Europe project on adolescents Mental Health). The team leader (Maria Melchior) has been awarded an ERC consolidator Grant (2021-2026). The scientific production of the team is excellent with 348 papers published between 2017 and 2022 (168 as leading authors) with 29 publications in the excellent journals in Public Health. In terms of the interactions with the non-academic world, the members of the ERES team participate as expert in several national committees (Santé Publique France, HAS, INED, Inserm collective expertise reports, Hearing by several Parliamentary commissions). Results issued from the research of the team have been integrated in national public health plans (French National Plan for Mobilization against Addictions, 2018-2022) or recommendations (French Health Authority's recommendations highlighting the need for targeted interventions in vulnerable populations). The team has developed several actions to share and disseminate knowledge in social epidemiology among the general public via a website (<https://eres.iplesp.fr/>) and a blog (<https://soepidemie.com/>). The team members are regularly interviewed by the media on topics concerning social epidemiology and mental health: France 2, BFM-TV, Le Monde, NY Times, Financial Times, France Inter.

Opportunities

The team has been very reactive during the COVID pandemic and has developed several projects (3 ANR and 2 H2020 fundings), some of which were integrated into already existing cohorts managed by the team (such as TEMPO cohort). The team pilots or is involved in several large national cohorts that allow the investigation of the research topics of the team. The upcoming collaborations with the Child and Adolescent Psychiatry Department at the Pitié Salpêtrière Hospital (CAPD-PS) is an excellent opportunity to improve the interventional approach of the team by focusing more specifically on the interactions between psychosocial determinants of mental health and development in clinical populations.

Weaknesses and risks linked to the context

The scientific domain of the ERES team (the investigation of the social determinants of mental health, and addiction, the burden of health and the factors associated to access to care) is a complex one that need to be investigated with a multidisciplinary approach integrating researchers in social sciences and economics. Moreover, given the multi-determined etiology of mental disorders, the integration of biological dimensions should be considered within the framework of longitudinal studies. These dimensions require a specific attention from the team. Several projects of the team are currently integrating this complex multi-level approach.

One of the components of the team project is to promote interventional studies which are still limited in the research activity and should be further developed. This should include a reflection on the problem of the implementation of interventions, which is particularly relevant in marginalized populations. This perspective has been added to the new team project.

The collaborations within the IPLESP unit (the other research teams) could be improved, particularly in terms of methodological approaches to large databases.

If the scientific production is excellent, it could be improved via international collaborations (Mean RCR of 1.55, which is slightly above NIH-funded average).

Threats

If the team has an excellent capacity to obtain research fundings (35 projects were funded during the present contract), this implies a large work of coordination for a limited number of permanent researchers (8) and an important amount of time spent to recruit short-term engineers and project managers. The team should develop a strategy to recruit more permanent staff and focus on the most innovative projects. A strongest international visibility could be reached by leading a European project (the team is currently co-PI in the European fundings). The mixed quantitative and qualitative approach proposed by the team is relevant to respond to the complexity of the developmental trajectories of mental disorders. But integrating this perspective into large-scale longitudinal cohort studies requires the development of specific expertise.

Analysis of the team's trajectory

Over the past five years, the ERES team has appropriately narrowed its focus to mental health and addiction with an opening to interventional studies, which gives more consistency and relevance to the team project. The new acronym ESSMA (Epidémiologie Sociale, Santé Mentale et Addictions) appropriately reflects this evolution. The enlargement of the research topics to traumatic events and to the mechanisms underlying the intergenerational transmission of mental disorders is coherent with the team project and seems an accessible objective with the longitudinal cohorts available to the team.

The team has made efforts to improve its multidisciplinary approach. This perspective could evolve further through collaborations with other teams with complementary skills (within IPLESP or outside).

The team publishing trend is very positive. It could be further improved through international collaborations.

The team has shown a significant ability to obtain research funding and fund doctoral scholarships. 6 members of the team are qualified to supervise doctoral students.

Overall, the team's track record of the past contract is very positive and should guarantee a positive outcome for the next contract.

RECOMMENDATIONS TO THE TEAM

- Increase the development of interventional studies, including implementation studies, which are particularly relevant for disadvantaged and marginalized populations.
- Consider opening up to translational studies in collaboration with other teams in the center or outside the center, relying on the longitudinal cohort studies in which the team is involved.
- Focus the team's efforts on the large-scale projects (such as the European projects) that have obtained substantial funds. This may allow prolonged/stable recruitments of researchers and research support staff, thus avoiding the risk of spending too much energy/resources on management issues.

CONDUCT OF THE INTERVIEWS

Date

Start: 10 janvier 2024 à 09h00

End: 10 janvier 2024 à 17h30

Interview conducted: on-site

INTERVIEW SCHEDULE

Les présentations de l'unité et des équipes ont lieu amphithéâtre CAROLI dans l'enceinte de l'hôpital Saint-Antoine

- 9:00-9:10** **Règlement intérieur du Hcéres par A SEIGNEURIN (5 mn) - Amphi CAROLI**
Présentation du Comité par son président (5mn)
Séance publique (tous les membres de l'unité)
- 9:10-9:50** **Présentation scientifique et administrative de l'unité (40 mn) - Amphi CAROLI**
30 min présentation + 10 min discussion
Séance publique (tous les membres de l'unité)
- 9:50-10:50** **Présentations scientifiques par les chefs d'équipe - Amphi CAROLI**
15 min présentation
15 min discussion (soit 30 min par équipe au total)
Séance publique (tous les membres de l'unité)
9:50-10:20: Equipe SUMO (PY Boëlle) (30 min)
10:20-10:50 Equipe CLEPIVIR (F Carrat) (30 min)
- 10:50-11:10** **Pause (20 min) - Amphi CAROLI**
- 11:10-12:40** **Présentations scientifiques par les chefs d'équipe - Amphi CAROLI**
11:10-11:40 Equipe THERAVIR (AG Marcelin) (30 min)
11:40-12:10 Equipe NEMESIS (B Chaix) (30 min)
12:10-12:40 Equipe PEPITES (F Tubach) (30 min)
- 12:40-13:40** **Pause (60 min) - RDC bâtiment Kourilsky**
- 13:40-14:10** **Présentations scientifiques par les chefs d'équipe - Amphi CAROLI**
13:40-14:10 Equipe ERES (M Melchior) (30 min)

Les réunions de l'après-midi ont lieu au 27 rue Chaligny, dans le bâtiment de la faculté de santé Sorbonne Université du site Saint-Antoine

- 14:10-14:40** **Rencontres simultanées en trois groupes parallèles d'experts du comité**
Rencontre avec les ITA (30 mn) - salle 005
En l'absence de tout personnel d'encadrement (directeur, chefs d'équipe)
Rencontre avec les chercheurs (30 mn) - salle 203

En l'absence de tout personnel d'encadrement (directeur, chefs d'équipe)

Rencontre avec les post-docs, doctorants et les étudiants (30 mn) - salle 205

En l'absence de tout personnel d'encadrement (directeur, chefs d'équipe)

14:40-15:25

Rencontre collective avec les représentants des établissements (45 mn) - salle 005

Réunion à huis clos

15:25-15:45

Pause (20 min) - salle 005

15:45-16:00

Rencontre avec le directeur et les chefs d'équipe de l'unité (15 mn)

salle 005

Réunion à huis clos

16:00-17:30

Débriefing du comité - salle 005

Réunion à huis clos

GENERAL OBSERVATIONS OF THE SUPERVISORS

Marie-Aude Vitrani
Vice-Présidente Vie institutionnelle et démarche
participative
Sorbonne Université

à

Monsieur Eric Saint-Aman
Directeur du Département d'évaluation de la recherche
HCERES – Haut conseil de l'évaluation de la recherche
et de l'enseignement supérieur
2 rue Albert Einstein
75013 Paris

Paris, le 3 avril 2024

Objet : Rapport d'évaluation iPLesp - Institut Pierre Louis d'épidémiologie et de santé publique

Cher Collègue,

Sorbonne Université vous remercie ainsi que tous les membres du comité HCERES pour le travail d'expertise réalisé sur l'unité de recherche « IPLesp ».

Sorbonne Université n'a aucune observation de portée générale à formuler sur le rapport d'évaluation transmis.

Je vous prie d'agréer, Cher Collègue, l'expression de mes cordiales salutations

Marie-Aude Vitrani
Vice-Présidente Vie institutionnelle
et démarche participative



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2 rue Albert Einstein
75013 Paris, France
T.33 (0)1 55 55 60 10

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