

## FINAL RESUME ON THE RESEARCH UNIT

EpiMaCT - EPIdémologie des MALadies Chroniques en zone Tropicale

### UNDER THE SUPERVISION OF THE FOLLOWING INSTITUTIONS AND RESEARCH BODIES:

Université de Limoges

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

Institut de recherche pour le développement – IRD  
CHU de Limoges

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### **EVALUATION CAMPAIGN 2020-2021** GROUP B



In the name of Hcéres<sup>1</sup>:

Mr Thierry Coulhon, President

In the name of the experts committee<sup>2</sup>:

Mr Gustavo Roman, Chairman of the committee

Under the decree No.2014-1365 dated 14 November 2014,

<sup>1</sup> The president of Hcéres "countersigns the evaluation reports set up by the experts committees and signed by their chairman." (Article 8, paragraph 5);

<sup>2</sup> The evaluation reports "are signed by the chairman of the experts committee". (Article 11, paragraph 2).

Tables in this document were filled with certified data submitted by the supervising body on behalf of the unit.

## UNIT PRESENTATION

**Unit name:**

EPIdémologie des MALadies Chroniques en zone Tropicale

**Unit acronym:**

EpiMaCT

**Current label and N°:**

UMR INSERM 1094

**ID RNSR:**

201220173E

**Application type:**

Renewal

**Head of the unit (2020-2021):**

Mr Pierre-Marie Preux

**Project leader (2021-2025):**

Mr Pierre-Marie Preux

**Number of teams and/or themes:**

1

## EXPERTS COMMITTEE MEMBERS

**Chair:**

Mr Gustavo Roman, Houston Methodist Hospital, USA

**Experts:**

Ms Sylvie Bastuji-Garin, Université Paris-Est, Créteil (representative of CNU)

Mr Matthieu Million, Aix-Marseille université, Marseille (representative of IRD)

Ms Élodie Speyer, Université Paris Saclay, Villejuif

Ms Anne Thiebaut, INSERM, Villejuif (representative of INSERM CSS)

## HCÉRES REPRESENTATIVE

Mr Serge Briançon

## REPRESENTATIVES OF SUPERVISING INSTITUTIONS AND BODIES

Ms Claire Corbel, Limoges University

Mr Dominique Cros, Limoges University

Ms Isabelle Klock Fontanille, Limoges University

Mr Yves Martin-Prével, IRD

Ms Muriel Mathonnet, CHU Limoges

Ms Marie-Cécile Ploy, Limoges University

Mr Richard Salives, Inserm

Mr Rémy Slama, Inserm

Ms Mireille Verdier, Limoges University

# INTRODUCTION

## HISTORY AND GEOGRAPHICAL LOCATION OF THE UNIT

The unit originated historically from the Institute of Epidemiology and Tropical Neurology (IENT), created in 1982 at the University of Limoges. The unit has been certified by Inserm since 2012 (U1094, Tropical NeuroEpidemiology-NET) and in 2019, it became associated with the "Institut de Recherche pour le Développement" (IRD). The current supervision of the unit is under the University of Limoges (host), Inserm and the University Hospital (CHU) of Limoges. The unit is located in the premises of the Faculties of Medicine and Pharmacy of Limoges in two nearby buildings. Since 2015, part of the unit has benefited from new premises, including laboratory facilities shared with another unit, in a new building (Centre de Biologie et de Recherche en Santé-CBRS, 3<sup>rd</sup> floor, 345 m<sup>2</sup> in addition to 286 m<sup>2</sup> in the older building). The whole unit is expected to move to the new building by 2026.

The unit is currently attached to the Doctoral School of Biological Sciences and Health (ED 615) which will merge with the other doctoral school of the  $\Omega$ -Health Institute in 2022. For the next mandate and due to thematic expansion, the unit has changed its name and will be the "EPIdémiologie des MALadies Chroniques en zone Tropicale" unit (EPIMACT).

## RESEARCH ECOSYSTEM

The unit is affiliated to the "Génomique Environnement Immunologie Santé Thérapeutique" (GEIST) Research Institute (eight research units) which is evolving into an  $\Omega$ -Health institute bringing together research and training activities in the field of human, animal, and environmental health in a One health vision. The institute, in partnership with the CHU, has defined four strategic axes: i) adaptation mechanisms, target variability, innovative therapies, precision medicine; ii) environment, health, and societies, coordinated by the EpiMaCT unit; iii) cancers; and iv) natural substances and innovations.

The unit is not yet involved in a PIA structure, but projects exist such as the creation of a university research school (EUR)  $\Omega$ -health.

This institute includes a technological platform, BISCEm (US42 Inserm/UMS2015 CNRS) with three poles: i) animal models; ii) cellular and tissue analyses; and iii) molecular analyses, and a cell dedicated to innovation and partnerships ( $\Omega$ -Health Innov).

The unit is attached, via the  $\Omega$ -Health Institute, to the ALLiance Innovation Santé Nouvelle-Aquitaine (ALLIS-NA), which brings together manufacturers, hospitals, universities, patient associations and a network of experts and support structures. The objectives are to develop health innovation and the regional health ecosystem. This cluster is nationally and internationally recognized in many areas of the health sector (biotechnologies, patient pathways, health data processing, etc.). The unit is a member of the French-speaking Regional Research Network and will contribute to the Oncosphere network which federates regional cancer research forces.

## HCÉRES NOMENCLATURE AND THEMATICS OF THE UNIT

SVE Sciences du vivant et environnement

SVE6 Santé Publique, Épidémiologie, Recherche Clinique

Neurology, dementia, cardiovascular diseases, cancer

Subsaharan Africa, Latin America, South-East Asia

Epidemiology, public health, prevalence, diagnosis, risk factor, nutrition, genetics, intervention, health policy

While the unit first dedicated itself to the epidemiology of neurological diseases in tropical areas, it has extended its interest in chronic non infectious diseases beyond neuroepidemiology for the past few years. During the ending contract, its research program was structured in four axes: epilepsy, neurodegenerative diseases (dementia, amyotrophic lateral sclerosis), cardiovascular diseases, and neurometabolism.

## MANAGEMENT TEAM

Unit's head: Mr Pierre-Marie Preux,

Executive committee: Mr Victor Aboyans, Ms Marie-Paule Boncoeur-Martel, Ms Véronique Blanquet, Mr Farid Boumédiène, Ms Maëliann Guerchet.

## UNIT WORKFORCE

### Épidémiologie des MALadies Chroniques en zone Tropicale

Active staff	Number 06/01/2020	Number 01/01/2022
Full professors and similar positions	18	20
Assistant professors and similar positions	6	5
Full time research directors (Directeurs de recherche) and similar positions	0	0
Full time research associates (Chargés de recherche) and similar positions	1	1
Other scientists ("Conservateurs, cadres scientifiques des EPIC, fondations, industries, etc.")		0
High school teachers	0	0
Supporting personnel (ITAs, BIATSSs and others, notably of EPICs)	20	25
<b>Permanent staff</b>	<b>45</b>	<b>51</b>
Non-permanent professors and associate professors, including emeritus	2	
Non-permanent full time scientists, including emeritus, post-docs (except PhD students)	2	
PhD Students	21	
Non-permanent supporting personnel	1	
<b>Non-permanent staff</b>	<b>26</b>	
<b>Total</b>	<b>71</b>	<b>51</b>

## GLOBAL ASSESSMENT OF THE UNIT

Since its creation, the NET unit is one of the world leader research teams dedicated to the field of neuroepidemiology in the tropics and to this respect, participates to the STROND (STandards of Reporting Of Neurological Disorders) group. Neurological descriptive and analytical epidemiology studies addressed epilepsy, neurocysticercosis, toxoplasmosis, stroke, motoneuron disease, dementia and psychiatric diseases. They successfully expanded their research into other domains including cardiovascular and metabolic diseases and joined the Global Burden of Disease (GBD) study, in which the unit has also gained international recognition in the cardiovascular field. Despite the obstacles posed by local unrest, difficult communications, lack of electricity and basic services in tropical regions, during 2018–2021 the NET conducted substantial research in three continents: Sub-Saharan Africa, South America and Southeast Asia.

An impressive number of scientific papers were published (363 articles with 60% co-signed with partners from the South and 63% signed as leading authors) including in high impact journals such as *The Lancet*. Novel discoveries include the South American origin of *Toxoplasma gondii*. Of note, the book "Neuroepidemiology in Tropical Health" they wrote, is a key book for the community and beyond.

One of the worthiest goals of NET is international cooperation with low- and middle-income countries from the South. The unit coordinates twenty-one research programs with these countries, fourteen of which were obtained during the current contract. The partnership with companies (SANOFI, Pierre Fabre Foundation, Bill and Melinda Gates Foundation, AXA Research Fund) allowed the development of three international networks (IMPACT, EMACAO and TROPALS) and the positive interactions with several non-profit governmental organizations (Global Council of Brain Health, Wellcome Trust), and with health authorities of the South countries allowed providing advice for public health policies (e.g., Benin, Cambodia, and Laos). The unit has contributed significantly to the spreading of knowledge through the elaboration of international guidelines and supports for

various organizations, members of the unit being experts in French (HAS, ARS, ITMO Santé Publique) and international (WHO, Global Council on Brain Health) committees. The NET has increased that mission training twenty-nine PhD students from sixteen different nationalities that participated as coauthors in 60% of the publications of the unit in the current term. Since 2018, the master's degree in Public Health enrolled eighty candidates from more than ten different nationalities. Public-private partnerships contribute to support research and education particularly in Public Health. Beside this strong involvement in teaching at the international level, the unit trained 120 master 1 and master 2 students and fifty PhD students. As a logical expansion of the mission of the unit, and to enhance its impact in terms of diagnosis, treatment, prevention and Public Health, the EpiMaCT (new name) project proposes to address the epidemiology of chronic diseases in tropical zones.

The five-year project, which aims to continue the extension of epidemiology and public health research to chronic non-communicable diseases, is definitely relevant. This project will be facilitated by the international recognition, knowledge, field experience, and the research tools acquired through the current and past contracts. Given the extension of the scope of the unit, EpiMaCT has to include experts in oncology and Biostatistics.

The evaluation reports of Hceres  
are available online: [www.hceres.com](http://www.hceres.com)

**Evaluation of clusters of higher education and research institutions**

**Evaluation of higher education and research institutions**

**Evaluation of research**

**Evaluation of doctoral schools**

**Evaluation of programmes**

**International evaluation and accreditation**



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