

Research evaluation

### FINAL RESUME ON THE RESEARCH UNIT PANTHER – Pathophysiology, Autoimmunity aNd immunoTHERapy

## UNDER THE SUPERVISION OF THE FOLLOWING INSTITUTIONS AND RESEARCH BODIES: Université de Rouen

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

# EVALUATION CAMPAIGN 2020-2021 GROUP B

Report published on June, 11 2021



### In the name of Hcéres<sup>1</sup>:

Mr Thierry Coulhon, President

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

Mr Sébastien Lacroix-Desmazes, Chairman of the committee

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

<sup>&</sup>lt;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>&</sup>lt;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: Pathophysiology, Autoimmunity aNd immunoTHERapy Unit acronym: PANTHER Current label and N°: UMR 1234 ID RNSR: 200816534S Application type: Renewal Head of the unit (2020-2021): Mr Olivier Boyer Project leader (2021-2025): Mr Olivier Boyer Number of teams and/or themes: 1

### **EXPERTS COMMITTEE MEMBERS**

Chair:	Mr Sébastien Lacroix-Desmazes, CNRS, Paris
Experts:	Ms Guislaine Carcelain, Université de Paris (representative of CNU) Ms Sylvia Cohen-Kaminsky, CNRS, Le Plessis Robinson Mr Niclas Setterblad, Sorbonne Paris Cité (supporting personnel) Mr Éric Tartour, Université Paris Descartes/HEGP (representative of Inserm CSS) Mr Thierry Walzer, Inserm, Lyon

# **HCÉRES REPRESENTATIVE**

Mr Théophile Ohlmann

## **REPRESENTATIVES OF SUPERVISING INSTITUTIONS AND BODIES**

Mr Joël Alexandre, Université de Rouen Ms Evelyne Jouvin-Marche, Inserm Mr Samir Oulid Ali, Inserm Mr Vincent Richard, Université de Rouen Mr Benjamin Terrier, Inserm



## INTRODUCTION

### HISTORY AND GEOGRAPHICAL LOCATION OF THE UNIT

The unit 1234 was created in 2017 under the direction of Mr Olivier Boyer and it is affiliated to the University of Rouen Normandy. The laboratory is located in the research building within the Faculty of Health of Rouen.

#### RESEARCH ECOSYSTEM

The unit is part of the Institute of Research and Innovation in Biomedicine (IRIB) which is a research federation grouping all resources in biomedical sciences in Normandy. The aim of IRIB is to focus on the understanding of disease physiopathology and the development of novel innovative diagnostic and therapeutic tools. As such it combines the expertise of different categories of researchers, namely clinicians, biologists and chemists from the University of Rouen.

### HCÉRES NOMENCLATURE AND THEMATICS OF THE UNIT

SVE3 Microbiologie, Virologie, Immunité

#### MANAGEMENT TEAM

The unit is directed by Mr Olivier Boyer and the deputy director is Ms Sophie Candon.

### UNIT WORKFORCE

#### Name of the unit: PANTHER

Active staff	Number 06/01/2020	Number 01/01/2022
Full professors and similar positions	13	12
Assistant professors and similar positions	7	7
Full time research directors (Directeurs de recherche) and similar positions	0	0
Full time research associates (Chargés de recherche) and similar positions	0	0
Other scientists ("Conservateurs, cadres scientifiques des EPIC, fondations, industries, etc.")	0	0
High school teachers	0	0
Supporting personnel (ITAs, BIATSSs and others, notably of EPICs)	19	13
Permanent staff	39	32
Non-permanent professors and associate professors, including emeritus	2	
Non-permanent full time scientists, including emeritus, post-docs (except PhD students)	3	
PhD Students	8	
Non-permanent supporting personnel	2	
Non-permanent staff	15	
Total	54	



# **GLOBAL ASSESSMENT OF THE UNIT**

The unit includes two subgroups, one dedicated to the pathophysiology of antibody-mediated autoimmune diseases, notably myositis and bullous cutaneous diseases, and one dedicated to translational research in gene and cell therapy with a focus on CAR/CAAR T cells. The unit is internationally recognized for its work on myositis and bullous autoimmune disorders, and for having influenced regulatory bodies (FDA and EMA) to improve the standard of care for pemphigus. It is a world leader in immune-mediated necrotizing myopathy, with the demonstration of the pathogenicity of anti-SRP and anti-HMGCR autoantibodies and the development of the first animal model of the disease.

The unit has produced 374 peer-reviewed publications and 105 publications with a unit member in a leading position, amongst which some are published in prestigious journals (such as *Nature Reviews Rheumatology, Lancet, British Journal of Dermatology, JAMA Dermatology, Molecular Therapy*). It has a strong collaborative activity with 269 collaborative publications, 30 identified collaborators and national as well as international collaborative grants (e.g., from the European Academy of Dermatology). Its visibility is strong as exemplified by numerous invitations to international conferences (e.g., National Institutes of Health, International Congress of Immunology, Keystone symposium, ...), the attribution in 2020 of the Spin Award, by chairing the European network on rare skin diseases and its recognition as a Center of Excellence by the US-based Federation of clinical immunology societies FOCIS. However, the unit production is supported by only half of the unit members.

The team is very successful at raising clinical and local/regional grants and grants from foundations and charities; however, the unit is lacking competitive grants at international levels (ERC, H2020, ...) to foster the hosting of postdoctoral fellows, which is rather low.

The involvement of the members of the unit in training is very good to excellent based on their contribution to medical, pharmaceutical and scientific Master or doctoral programs, on the number of students hosted and trained in the unit, and on the quality of their publications. The ratio between the PhD students trained and the number of members with HDR could be significantly improved and reflects the lower implication of several investigators in the scientific life and research activities of the unit. Several students also published in rather low impact journals or not as a first author.

The PANTHER unit has developed an excellent track record in valorization, a strong interaction with the nonacademic world (private industry, clinical trials, media) and has played an outstanding role in improving the treatment of pemphigus patients through the modification of standard of care. The unit develops too many research projects with respect to the number of active researchers and engineers/technicians, and to the absence of full-time researchers. The unit is setting up a new cell therapy unit on production of CAR T cells for cancer therapy, which may become a good opportunity to foster new areas of fundamental research. There is nevertheless a significant degree of risk associated with this new orientation in view of the international competition. The unit is advised to focus on the use of CAR/CAAR T cells in autoimmune diseases in order to foster complementarity and synergy between the different subgroups and capitalize on its world recognition in the field of autoimmune diseases. The evaluation reports of Hceres are available online: <u>www.hceres.com</u>

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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