

FINAL RESUME ON THE RESEARCH UNIT:  
Signalling and Cardiovascular Pathophysiology  
(CARPAT)

UNDER THE SUPERVISION OF THE  
FOLLOWING INSTITUTIONS AND  
RESEARCH BODIES:

Université Paris-Sud

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

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**EVALUATION CAMPAIGN 2018-2019**  
GROUP E

Rapport publié le 01/04/2019



In the name of Hcéres<sup>1</sup>:

Michel Cosnard, President

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

Karin Sipido, Chairwoman 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 data provided by laboratories and supervising bodies in the unit's application and in the Excel files "Données du contrat en cours" and "Données du prochain contrat".

## UNIT PRESENTATION

<b>Unit name:</b>	Signalling and Cardiovascular Pathophysiology
<b>Unit acronym:</b>	CARPAT
<b>Requested label:</b>	UMR
<b>Application type:</b>	Renouvellement
<b>Current number:</b>	UMR-S 1180
<b>Head of the unit (2018-2019):</b>	Ms Ana María GÓMEZ GARCÍA
<b>Project leader (2020-2024):</b>	Ms Ana María GÓMEZ GARCÍA
<b>Number of teams:</b>	3

## EXPERTS COMMITTEE MEMBERS

<b>Chair:</b>	Ms Karin SÍPIDO, University of Leuven, Belgium
<b>Experts:</b>	Mr Jean-Francois ARNAL, Université Toulouse (representative of Inserm CSS) Mr Fabio DI LISA, Università Degli Studi Di Padova, Italy Mr David EISNER, University of Manchester, United Kingdom Mr Jean-Yves LE GUENNEC, Université de Montpellier (representative of CNU) Ms Raffaella SOLETI, Inserm Angers (supporting personnel)

## HCÉRES REPRESENTATIVE

Ms Florence PINET

## REPRESENTATIVES OF SUPERVISING INSTITUTIONS AND BODIES

Mr Etienne AUGÉ, University Paris Sud  
Mr Christian BOYTARD, Inserm  
Mr Marc PALLARDY, University Paris Sud

## INTRODUCTION

### HISTORY AND GEOGRAPHICAL LOCATION OF THE UNIT

UMR\_S1180 Signaling and Cardiac Pathophysiology (Inserm and University Paris-Sud) is located within the Faculty of Pharmacy of University Paris-Sud / University Paris-Saclay at Chatenay-Malabry. The present unit, led by AM Gomez, was created in 2015 and is the continuation of the unit UMR-S 769 with the same name that has been active since January 2006 under leadership of Rodolphe Fischmeister. An earlier Inserm unit (446, Cellular and Molecular Cardiology) from 2002-2006 was the basis for the UMR-S 769.

### MANAGEMENT TEAM

The director of UMR\_S1180 is Ms Ana-Maria Gomez-Garcia, the deputy director is Mr Rodolphe Fischmeister.

### HCÉRES NOMENCLATURE

SVE5\_1; SVE5\_2.

### SCIENTIFIC DOMAIN

The UMR\_S1180 is investigating cellular and molecular signalling in the heart, with an important focus on pathophysiology. The unit has three major themes. Team 1 is studying cardiac energetics and signalling, team 2 is focused on cyclic nucleotide signalling and team 3 on calcium signalling. Across the three teams are common topics of pathophysiology such as the responses in cardiac hypertrophy and heart failure, studied in various animal models. The attention to 'in vivo' function to provide a perspective to the molecular/cellular data is a more recent enrichment of the work. As well, the research has expanded to include vascular function.

### UNIT WORKFORCE

	Unit workforce	
	Signalling and Cardiovascular Pathophysiology	
Active staff	Number 30/06/2018	Number 01/01/2020
Full professors and similar positions	4	3
Assistant professors and similar positions	8	8
Full time research directors (Directeurs de recherche) and similar positions	5	5
Full time research associates (Chargés de recherche) and similar positions	3	2
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)	8	8
<b>Permanent staff</b>	<b>28</b>	<b>26</b>
Non-permanent professors and associate professors, including emeritus	2	

Non-permanent full time scientists, including emeritus, post-docs	9	
PhD Students	24	
Non-permanent supporting personnel	2	
<b>Non-permanent staff</b>	<b>37</b>	
<b>Total</b>	<b>65</b>	

## GLOBAL ASSESSMENT OF THE UNIT

The unit is internationally recognized and has an excellent publication output that has grown between 2013 and 2018. The research activities of the unit include translational studies that inform on mechanisms of disease. These form the basis for development of novel therapeutics. The unit was successful in obtaining national grants such as ANR and a member of the unit is the founder of the Labex LERMIT. PhD students have a very good publication output, they got positions, mostly as post-docs in an international context, attesting to the quality of their training. The unit has an excellent organization to support the research activities and has regular meetings that ensure coherence between the teams. The project of the unit is the continuation of successful previous research, and furthermore includes new directions, that will lead to stronger interactions with clinical research and innovation. New collaborations will be facilitated by the planned relocation of the unit to new labs at the Paris-Saclay campus.

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