

# HCERES

High Council for the Evaluation of Research  
and Higher Education

Research units

HCERES report on research unit:

Laboratoire de recherche en cardiovasculaire,  
Métabolisme, Diabétologie et Nutrition

CarMeN

Under the supervision of the following  
institutions and research bodies:

Université Claude Bernard Lyon 1 – UCB

Institut National de la Recherche Agronomique – INRA

Institut National des Sciences Appliquées de Lyon

Institut National de la Santé Et de la Recherche

Médicale – INSERM

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*In the name of HCERES,<sup>1</sup>*

Didier HOUSSIN, president

*In the name of the experts committee,<sup>2</sup>*

Bart STAELS, chairman of the committee

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

<sup>1</sup> The president of HCERES "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 expert committee". (Article 11, paragraph 2)

## Evaluation report

This report is the result of the evaluation by the experts committee, the composition of which is specified below.

The assessments contained herein are the expression of an independent and collegial deliberation of the committee.

Unit name:	Laboratoire de recherche en Cardiovasculaire, Métabolisme, Diabétologie et Nutrition
Unit acronym:	CarMeN
Label requested:	UMR_S, UMR
Present no.:	UMR_S 1060, UMR 1397
Name of Director (2014-2015):	Mr Hubert VIDAL
Name of Project Leader (2016-2020):	Mr Hubert VIDAL

## Expert committee members

Chair:	Mr Bart STAELS, University of Lille 2, Lille
Experts:	Mr Yves BOIRIE, University of Auvergne, CHU de Clermont-Ferrand (representative of the CSS INRA)
	Mr Stefano DEL PRATO, University of Pisa, Italy
	Mr Jean-Claude MARTINOU, University Geneva, Switzerland
	Ms Catherine POSTIC, Institut Cochin, Paris (representative of the CSS Inserm)
	Mr Bruno VERGÈS, CHU Dijon

### Scientific delegate representing the HCERES:

Mr Jean GIRARD

### Representatives of the unit's supervising institutions and bodies:

Ms Emmanuelle CANET-SOULAS (representative of the École Doctorale EDISS, ED n°205)

Mr Jean DALLONGEVILLE, INRA

Mr Jean-François GERARD, INSA de Lyon

Mr Germain GILLET, Lyon 1 University

Ms Muriel MALBEZIN, DRCI, Hospices Civils de Lyon

Ms Anne ROCHAT, Inserm

# 1 • Introduction

## History and geographical location of the unit

CarMen laboratory was created in January 2011, gathering about 140 members coming from the Inserm/INRA unit 870/1235 (headed by Mr Hubert VIDAL) and the Inserm unit 886 (headed by Mr Michel OVIÈ) joined by researchers and clinicians from different other laboratories.

The CarMen laboratory is currently located in 3 distinct places: the Lyon-Sud Medical School (Oullins), the Rockefeller Medical school (Lyon-Est) and the IMBL (Institut Multidisciplinaire de Biochimie des Lipides) Building at INSA de Lyon (Villeurbanne).

## Management team

The unit is headed by Mr Hubert VIDAL, who is assisted by a steering committee composed of the heads of the 5 teams and a unit council.

Team 5 is headed by one team leader, whereas teams 1-4 are each headed by two team leaders (one basic researcher and one clinical scientist) in order to emphasize the translational research approaches and to facilitate the interaction between clinicians and basic scientists.

The 3 sites have an independent general organization (hygiene, safety, etc.) and budget management consisting of financial, hygiene & security and quality managers.

A general assembly is held annually and specific committees (students, technical platforms, etc.) are organized on a regular basis.

## HCERES nomenclature

SVE1\_L4

## Unit workforce

Unit workforce	Number as at 30/06/2014	Number as at 01/01/2016
<b>N1:</b> Permanent professors and similar positions	57 (21)	55 (20)
<b>N2:</b> Permanent researchers from Institutions and similar positions	21	19
<b>N3:</b> Other permanent staff (without research duties)	23	24
<b>N4:</b> Other professors (Emeritus Professor, on-contract Professor, etc.)	2	1
<b>N5:</b> Other researchers (Emeritus Research Director, Postdoctoral students, visitors, etc.)	6	6
<b>N6:</b> Other contractual staff (without research duties)	15	15
<b>TOTAL N1 to N6</b>	<b>124 (88)</b>	<b>120 (85)</b>

Unit workforce	Number as at 30/06/2014	Number as at 01/01/2016
Doctoral students	29	
Theses defended (since 2011)	37	
Postdoctoral students having spent at least 12 months in the unit	12	
Number of Research Supervisor Qualifications (HDR) taken (since 2011)	6	
Qualified research supervisors (with an HDR) or similar positions	53	53

## 2 • Overall assessment of the unit

### Global assessment of the unit

The research unit CarMeN is a joint research unit (Inserm, INRA, INSA, University Lyon 1) performing bench-to-bedside studies on the mechanisms of metabolic and cardiovascular diseases as well as their prevention, through nutritional and environmental approaches, and treatment, through therapeutic approaches. Through efficient “clinician-basic scientist” partnerships, the research unit develops in 5 research teams original, translational research projects. The attractiveness of the unit is illustrated by the fact that its initial size of 140 members has been increasing throughout the years (to 180 in 2014). The scientific production and, in particular, the quality of papers in high-end journals has also been steadily increasing. The research unit has a large scientific output, with a good balance between “basic/clinical” and “internally managed/external collaboration” publications. A large number of national and international collaborations illustrate the recognition of the unit and its members. The internal organisation is exemplary with an overall management team assisted by appropriate committees. Several technical platforms have acquired ISO9001 labels and the unit is developing appropriate approaches to deal with data management. Internal/external communication is well organized through intra- and internet websites. Overall the research projects of CarMeN are of very high scientific and societal relevance, the organisation very strong and the scientific production steadily increasing in quantity and quality. This excellently organized unit has reached cruising speed.

### Strengths and opportunities in relation to the context

The intense research activity is illustrated by the large number of publications, which has been steadily increasing in quantity and quality over the years. A good balance between internal and external, collaborative publications is maintained, illustrating that the unit initiates original research projects.

The geographical location of the unit, until now divided over 3 distinct campuses, will be improved by the construction of new research laboratories allowing the different teams to be closer together. These infrastructural developments have been possible thanks to the strong implication of unit members in important research initiatives, such as the IHU Opera and “Centre Européen Nutrition Santé” (CENS) projects.

The translational approach of its research, combining basic scientists with clinicians in each team, allows the development of translational approaches with high relevance to the medical community as well as the general population.

Excellent organisation of the unit, with appropriate internal research platforms (of high quality as illustrated by ISO9001 labeling), management board, scientific animation, well-balanced human resources (full time scientists, university professors, hospital doctors, students and post-doctoral fellows, engineers and technicians).

A balanced budget, with resources coming from recurrent funds, grant applications (national and EU), as well as industry collaborations, thus limiting the financial risk of the unit. The unit has taken a large number of patents, illustrating its strong valorisation activity.

Leader and participant in several structuring initiatives, such as IHU, FHU, CENS, ANR, Equipex, etc.

### Weaknesses and threats related to the context

The dispersed location of the teams in a large city could hamper day-to-day interactions between members of the teams, which may interfere with the fostering of novel ideas. However, the research unit has obtained sufficient funds to construct new laboratories allowing to regroup several teams, which will certainly improve interactions, importantly also among fellows and PhD students to exchange scientific ideas. The unit has also developed an intranet website allowing communication between all its members.

Current threats for the research society reside in the increasing administrative burden (the unit director is without managerial assistance), lower success rates of funding applications, hence requiring more sustained search for funding. It is clear that the unit does not dispose of a sufficient logistical staff to assist its director and permanent researchers in the management of this increasing burden.

Although the retirement of several unit members has been well absorbed by hosting new members, the attraction of young researchers of high quality is essential, not only to maintain scientific research output levels, but also in light of the future directorship and management. However, the unit has already taken appropriate measures to send out young fellows for training and guiding candidates for applications.

### Recommendations

This unit is a remarkably organized and structured unit. Given the strong translational approach of the unit, particular attention should be given to generate an even stronger implementation of preventive and therapeutic outcomes to serve patients and the general population, which is in line with the major strengths of the unit. The experts committee also recommends to further structure its administrative staff to face the increasing administrative burden.