

# HCERES

High Council for the Evaluation of Research  
and Higher Education

Research units

HCERES report on research unit:

Laboratory of Microbial Molecular Genetics

LMGM

Under the supervision of  
the following institutions  
and research bodies:

Université Toulouse 3 - Paul Sabatier - UPS

Centre National de la Recherche Scientifique - CNRS

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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>*

Frédéric BOCCARD, 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:	Laboratory of Microbial Molecular Genetics
Unit acronym:	LMGM
Label requested:	CNRS, UNIVERSITY
Present no.:	UMR 5100
Name of Director (2014-2015):	Mr Agamemnon CARPOUSIS
Name of Project Leader (2016-2020):	Mr Patrice POLARD

## Expert committee members

Chair:	Mr Frédéric BOCCARD, CGM, Gif-sur-Yvette
Experts:	Mr Jean-François COLLET, Catholic University of Leuven, Belgium
	Ms Mariana G PINHO, University of Lisboa, Lisboa, Portugal
	Mr Pierre LEBLOND, University of Lorraine, Vandoeuvre les Nancy (representative of the CNU)
	Mr Olivier LESPINET, Paris-Sud University, Paris
	Ms Béatrice PY, CIML, Marseille (representative of the CNRS)
	Ms Pascale ROMBY, IBMC, Strasbourg

Scientific delegate representing the HCERES:

Ms Sophie EZINE

## Representative(s) of the unit's supervising institutions and bodies:

Mr Dominique GIORGI, CNRS

Ms Sylvie ROQUES, CNRS

Mr Alexis VALENTIN, Université Toulouse 3

Mr Philippe VALET (director of the Doctoral School N° 151 "Biologie, Santé et Biotechnologies")

## 1 • Introduction

### History and geographical location of the unit

The LMGM is a CNRS unit associated with University Paul Sabatier Toulouse 3. Together with the Laboratoire de Biologie Moléculaire Eucaryote (LBME), it was created in 1992 after a reorganization of the Centre de Recherche en Biochimie et Génétique Cellulaires (CRBCG). In 2011, a service unit (IBCG) was created to manage the logistics, technic and infrastructure of the building hosting the two units. Both units are part of the FRBT “Fédération de Recherche en Biologie de Toulouse”, a federation of the life sciences laboratories created in 2011 on the university campus. The FRBT will evolve towards the creation of the federative structure “Centre de Biologie Intégrative” CBI, a research center on post-genomic integrative biology that will emerge with the construction of a new institute physically linked to IBCG.

### Management team

Director: Mr Agamemnon CARPOUSIS

Deputy Director: Mr Patrice POLARD (until 11/2014)

Project Leader: Mr Patrice POLARD

The research teams of LMGM will be grouped in three themes: Genome expression and adaptative networks, Genome organization and maintenance, Genome evolution and plasticity. Each theme will be under the supervision of a group leader, including the head of the unit. This will allow the organization of a board that will assist the head of the unit for the management of LMGM.

### HCERES nomenclature

SVSE-LS2 / SVSE-LS1

### Unit workforce

Unit workforce	Number as at 30/06/2014	Number as at 01/01/2016
<b>N1:</b> Permanent professors and similar positions	12	8
<b>N2:</b> Permanent researchers from Institutions and similar positions	16	13,80
<b>N3:</b> Other permanent staff (without research duties)	14,40	14,40
<b>N4:</b> Other professors (Emeritus Professor, on-contract Professor, etc.)		1
<b>N5:</b> Other researchers (Emeritus Research Director, Postdoctoral students, visitors, etc.)		3
<b>N6:</b> Other contractual staff (without research duties)	9	
<b>TOTAL N1 to N6</b>	<b>51,40</b>	<b>40,20</b>

Unit workforce	Number as at 30/06/2014	Number as at 01/01/2016
Doctoral students	10,5	
Theses defended	15	
Postdoctoral students having spent at least 12 months in the unit	5	
Number of Research Supervisor Qualifications (HDR) taken	3	
Qualified research supervisors (with an HDR) or similar positions	15	13

## 2 • Overall assessment of the unit

### Global assessment of the unit

The *Laboratoire de Microbiologie et Génétique Moléculaire* has a very good visibility at both the national and international levels. Overall, the productivity of the research groups is very good. The scientific policy of the unit shows a strong internal complementarity and a coherence in the developed scientific themes. A bioinformatic team is well integrated into the unit with the development of several collaborative projects with other groups. Research groups obtained very good success in ANR funding. The groups also benefit from a good level of technical support and a high number of PhD students. National and international collaborations have been established in many groups. Scientists from the unit participate actively in teaching and training action at the University in the microbiology field. The unit has set up a Scientific Advisory Board to carry out a review of scientific projects. Significant efforts have been made to orientate some of the projects towards system biology in order to join the Centre de Biologie Intégrative (CBI) and to position the unit as a major actor of the CBI.

### Strengths and opportunities in relation to the context

Research groups from LMGM have access to innovative technologies already present in the unit or in the IBCG. The access to other cutting-edge technologies will be facilitated through the implementation of new platforms within the new CBI. This new institute will also help the development of multidisciplinary projects and ease the recruitment of new research groups in LMGM. Because of the departure or retirements of several university professors, the unit should recruit new professors in integrative microbiology.

### Weaknesses and threats related to the context

Because several group leaders with international visibility have ceased their activity, the new group leaders will need to gain their own visibility, and particular care will be needed to support teams with critical size. Most of the teams have been successful in obtaining ANR grants, but the budget of the unit may also rely more on international funding. Besides, only few postdoc researchers have been recruited on the ANR grants because most of the teams have privileged the recruitment of engineers.

As the CBI will develop multidisciplinary projects involving cell biology, development and neurosciences, LMGM should be a driving force for the development of projects involving the use of microbes.

### Recommendations

The committee recommends that LMGM launches new calls for the recruitment of new groups in the field of prokaryotic genome biology. It may facilitate the recruitment of new groups by consolidating attractive package starting grants. Besides, the committee feels that a minimal workforce in research groups should be ensured, i.e. providing technical support, primarily for emerging teams.

A high level of collaboration between groups of the unit should be maintained, and the most competitive groups should apply to EU fundings and to international ANR grants.

The collegial management of the unit should be reinforced and the direction should take care about internal communication on LMGM's organization and on the ongoing CBI project. LMGM should participate actively in the board of the CBI to play an important role in definition of the CBI scientific policy and to ensure the development of multidisciplinary projects involving microbes.