

HCERES

High Council for the Evaluation of Research
and Higher Education

Research units

HCERES report on research unit:

Laboratory of Molecular Biology of Eukaryotes

LBME

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,¹

Didier HOUSSIN, president

In the name of the experts committee,²

Michel WERNER, chairman of the committee

Under the decree N°2014-1365 dated 14 november 2014.

¹ The president of HCERES "countersigns the evaluation reports set up by the experts committees and signed by their chairman." (Article 8, paragraph 5)

² 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 Molecular Biology of Eukaryotes
Unit acronym:	LBME
Label requested:	UMR
Present no.:	UMR 5099
Name of Director (2014-2015):	Mr Pierre-Emmanuel GLEIZES
Name of Project Leader (2016-2020):	Mr Pierre-Emmanuel GLEIZES

Expert committee members

Chair:	Mr Michel WERNER, Institute of Biology and Technology, Saclay
Experts:	Mr Olivier BENSUADE, Ecole Normale Supérieure, Paris
	Mr Christophe CARLES, Institute of Biology and Technology, Saclay
	Mr Jean CAVARELLI, Integrated Structural Biology Department, Illkirch (representative of the CNU)
	Mr Witold FILIPOWICZ, Friedrich Miescher Institute, Switzerland
	Mr Olivier JEAN-JEAN, University Pierre and Marie Curie, Paris (representative of the CoNRS)
	Mr Bertrand SERAPHIN, Institute of Genetics and Molecular and Cellular Biology, Illkirch

Scientific delegate representing the HCERES:

Mr Pierre COUBLE

Representatives of the unit's supervising institutions and bodies:

Mr Dominique GIORGI, CNRS

Mr Alexis VALENTIN, University Toulouse 3

Mr Philippe VALET (Doctoral School UPS - "Biologie, santé, biotechnologies" - ED N° 151)

1 • Introduction

History and geographical location of the unit

The unit is active in molecular biology, specializing in non-coding RNA biology, chromatin structure and function, ribosome biology and genome dynamics. It is located on the campus of the Paul Sabatier University in Toulouse. This city is the second university town in France with 120 000 students. A large number of laboratories provide a rich environment for interdisciplinary research. The university of Toulouse has received the IDEX label. The Laboratory of Molecular Biology of Eukaryotes (LBME) was created in 1993 and occupies half of the IBCG building together with another unit. The current head of the unit was appointed in 2012 following the retirement of the previous one. He will be in charge for the next five years. In 2011, the unit included eight teams, six of which were appointed between 2004 and 2009. Two of these groups were supported by ATIP/Avenir grants. One of the teams was dissolved because of serious difficulties, including the passing away of one of its two co-PIs. Thus presently, the unit consists of seven research teams, three quarters of which are rather young.

Management team

The unit is chaired by a Director, who is a university professor. The administration comprises three persons for finance and personnel. Some researchers have technical responsibilities for specific apparatus or services. The unit shares the IBCG building with another unit with which it shares information technology management, building maintenance, seminar organization and reception. The building and facilities are managed through a "groupement de services" by the heads of the two units. Group leaders meet once a month to discuss the scientific and operational policy of the unit. A laboratory council meets three times a year to discuss the unit organization and equipment projects and for consultation on its scientific policy. A health and safety and a maintenance committee have been set up during the current period to help the director in the decision making process.

HCERES nomenclature

SVE_LS2, _LS1

Unit workforce

Unit workforce	Number as at 30/06/2014	Number as at 01/01/2016
N1: Permanent professors and similar positions	8	9
N2: Permanent researchers from Institutions and similar positions	17	18
N3: Other permanent staff (without research duties)	18	19
N4: Other professors (Emeritus Professor, on-contract Professor, etc.)		
N5: Other researchers (Emeritus Research Director, Postdoctoral students, visitors, etc.)	2	2
N6: Other contractual staff (without research duties)	1	1
TOTAL N1 to N6	46	49

Unit workforce	Number as at 30/06/2014	Number as at 01/01/2016
Doctoral students	9	
Theses defended	20	
Postdoctoral students having spent at least 12 months in the unit	14	
Number of Research Supervisor Qualifications (HDR) taken	6	
Qualified research supervisors (with an HDR) or similar positions	18	15

2 • Overall assessment of the unit

Global assessment of the unit

The unit specializes in the fields of non-coding RNA biology, nuclear structure and function. Some of its teams are at the forefront of their field. The unit provides a dynamic scientific environment and has published around three quarters of its findings in excellent or very good journals. The unit is attractive with the incoming of a quite large number of permanent researchers or university professors. Research is supported by a variety of platforms including advanced light and electron microscopy and next generation sequencing (NGS). The unit is strongly involved in teaching which definitively helps in the recruitment of talented M2 and PhD students most of whom have found jobs related to science. However, while 14 post-docs were trained over the past 5 years, the unit currently encounters difficulties in recruiting new post-doctoral fellows.

In the past five years, most teams have been able to attract sufficient funding through competitive grants. Obtaining grants might be more difficult in the future. This situation is not specific to this unit, being general in the country, but support from European Union grants has not been obtained yet, which is considered as a priority. A couple of applications are pending.

In the future, the plans are to integrate the unit in the Center for Integrative Biology (CBI) that will consist of five units with related interests. The CBI will be housed in the current building and a new one, due in 2018. The creation of the CBI will enrich the scientific life of the unit, provide access to more tools and allow for economies of scale.

Strengths and opportunities in relation to the context

- the unit has a long standing expertise in non-coding RNA and nucleus biology;
- a clear scientific strategy within the framework of the CBI is proposed by the unit;
- three quarters of the research groups are less than ten years old. All teams are dynamic;
- the teams have access to up to date technologies in light and electron microscopy and NGS. The creation of the CBI will increase the toolbox at their disposal;
- the unit researchers are strongly involved in teaching at the university.

Weaknesses and threats related to the context

- the financial support of several teams is not ensured in the future. This situation is worrisome in the face of declining ANR project application success;
- the number of post-doctoral fellows and PhD students should be increased given the number of HDRs in the unit;
- biostatistics and bioinformatics should be strengthened;

- support for electron microscopy EM is not sufficient.

Recommendations

- the committee strongly recommends that the unit teams actively look for support from the European Union in the form of ERC or H2020 grants. They might also turn to the private sector;
- while the unit is attracting researchers, the number of non-permanent researcher should be increased, in particular post-doctoral fellows;
- the CBI will definitively be essential for the future of the unit and, more generally, for biology in Toulouse. The unit is praised for its implication in this endeavour and strongly encouraged to pursue its very active participation to the setting up of the CBI;
- the unit wants to recruit at least one new team. However, it should be cautious in selecting candidates that are able to support their research at the highest level. To have suitable candidates the unit should be prepared to offer an attractive installation package upfront.