

# HCERES

High Council for the Evaluation of Research  
and Higher Education

Research units

HCERES report on research unit:

Immunogenomics and Inflammation

Under the supervision of  
the following institutions  
and research bodies:

Université Claude Bernard Lyon 1 - UCB

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High Council for the Evaluation of Research  
and Higher Education

Research units

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

Didier HOUSSIN, president

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

Cem GABAY, chairman of the committee

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Under the decree N°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:	Immunogenomics and Inflammation
Unit acronym:	
Label requested:	EA
Present no.:	EA 4130
Name of Director (2014-2015):	Mr Pierre MIOSSEC
Name of Project Leader (2016-2020):	Mr Pierre MIOSSEC

## Expert committee members

Chair:	Mr Cem GABAY, University of Geneva School of Medicine, Switzerland
Experts:	Mr Thierry MARTIN, National Referral Center for Systemic Autoimmune Diseases, Strasbourg Mr Alexander So, University of Lausanne School of Medicine, Switzerland
Scientific delegate representing the HCERES:	Mr Kamel BENLAGHA
Representatives of the unit's supervising institutions and bodies:	Ms Emmanuelle CANET-SOULAS (representative of Doctoral School EDISS n° 205) Mr Denis FOUQUE, University Lyon 1

## 1 • Introduction

### History and geographical location of the unit

The Immunogenomics and Inflammation unit was created in 2002 as a joint effort between public and private bodies, namely the University Hospitals of Lyon and BioMérieux. The research activities of the EA 4130 unit are primarily focused on translational projects in the field of rheumatoid arthritis (RA) with a specific interest in cytokine biology. The research laboratories are located within the Hospital and benefit of a close interaction with clinicians and an easy access to biological samples. Using samples from the clinic the research team has obtained interesting results on biomarkers predicting the therapeutic response to biological agents and disease severity, as well as on the role of interleukin (IL)-17 in the pathogenesis of RA.

### Management team

The research team is led by Professor Pierre Miossec and includes 2 other academic researchers, 2 tenured researchers, 2 technicians, and 4 post-doctoral fellows and PhD students.

### HCERES nomenclature

SVE1\_LS6 Immunology, microbiology, virology, parasitology

### Unit workforce

Unit workforce	Number as at 30/06/2014	Number as at 01/01/2016
<b>N1:</b> Permanent professors and similar positions	2	2
<b>N2:</b> Permanent researchers from Institutions and similar positions		
<b>N3:</b> Other permanent staff (without research duties)	1	1
<b>N4:</b> Other professors (Emeritus Professor, on-contract Professor, etc.)		
<b>N5:</b> Other researchers from Institutions (Emeritus Research Director, Postdoctoral students, visitors, etc.)	4	4
<b>N6:</b> Other contractual staff (without research duties)		
<b>TOTAL N1 to N6</b>	<b>7</b>	<b>7</b>

Unit workforce	Number as at 30/06/2014	Number as at 01/01/2016
Doctoral students	2	
Theses defended	4	
Postdoctoral students having spent at least 12 months in the unit	2	
Number of Research Supervisor Qualifications (HDR) taken	1	
Qualified research supervisors (with an HDR) or similar positions	2	2

## 2 • Overall assessment of the unit

### Global assessment of the unit

The research unit is an excellent example of translational research with strong interactions between the Rheumatology clinical unit and the laboratory located within the Hospital. The overall research questions focus on cytokine biology in inflammatory rheumatic diseases with a specific interest in IL-17 biology. The unit has published several original articles in leading journals of the speciality such as in *Ann Rheum Dis* and *Arthritis Rheumatol* during the last five years. As a reflection of its productivity in the field, the unit director has been invited to contribute to several review articles in leading journals such as the *New Engl J of Med*, *The Lancet* and *Nature reviews*. The director of the unit has also been rewarded by several awards during the last five years, including the Carol Nachman prize of Rheumatology, the Leon Kochman lecture prize of the University of Maryland (USA), and the Jean Dausset prize from the French Society of Immunology. The unit is also involved in clinical research on biomarkers of response to therapy and in predictors of disease severity. The unit participates also to the training of young scientists and physicians; two of them have recently obtained Professor positions.

The evaluation of the unit is excellent (within the 20% of the best) taking into account its productivity, the international visibility of its director, the interactions with local partners as well as international collaborations, and the teaching activities.

### Strengths and opportunities in relation to the context

The location of the unit at the University Hospitals of Lyon is excellent and has provided clinical samples to perform cutting-edge translational research. The research is mostly focused on IL-17 cytokine and has been very successful as far as publication numbers during the last 5 years. The laboratory has examined the expression of IL-17 cytokines, mainly IL-17A and IL-17F in different tissues and circulating blood cells. With a primary interest in rheumatoid arthritis, they have progressively also extended their research interests to other pathological conditions such as myositis and atherosclerosis. They have also examined the function of IL-17 alone or in combination with other cytokines such as TNF- $\alpha$  in the stimulation of inflammatory responses *in vitro*.

The unit has developed a partnership with industry (Biomérieux) that provided access to research platforms (genomic facility).

### Weaknesses and threats related to the context

The size of the unit is relatively small and is also isolated from other Immunology research units in Lyon. In particular, the access to research platforms, the academic interactions with other research groups is limited, although the director of the unit has developed many local and international collaborations. The relative lack of close interaction with basic science laboratories is a limitation for the development of *in vivo* experimental approaches, the use of cutting-edge molecular approaches, as well as the interaction of PhD students and post-doctorants with other junior and senior researchers from other laboratories. This potential weakness is somehow counter-balanced by the close interaction with the clinical environment that has been essential for the research projects of the unit. The committee felt that the lack of tenured scientist position is a potential weakness for the future of the unit, as well as for the training of postdoctoral fellows and PhD students.

### Recommendations

The unit has been very successful so far. We would recommend to establish a tenure position for a scientist in order to reinforce the research structure.