EPILAB - Épigénétique des infections virales et des maladies inflammatoires

Rapport Hcéres

HCERES

High Council for the Evaluation of Research and Higher Education

Research units

HCERES report on research unit:

Épigénétique des Infections Virales et des Maladies Inflammatoires

EPILAB

Under the supervision of the following institutions and research bodies:

Université de Franche-Comté - UFC

Evaluation campaign 2015-2016 (Group B)

HCERES

High Council for the Evaluation of Research and Higher Education

Research units

In the name of HCERES,[1]

Michel Cosnard, president

In the name of the experts committee,[2]

Christian Muchardt, 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 sole result of evaluation by the expert committee, the composition of which is specified below.

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

Unit name:	Epigénétique des Infections Virales et des Maladies Inflammatoires
Unit acronym:	EPILAB
Label requested:	EA University of Franche-Comté
Current number:	EA 4266
Name of Director (2015-2016):	Mr Georges HERBEIN
Name of Project Leader (2017-2021):	Mr Georges HERBEIN

Expert committee members

Chair:	Mr Christian MUCHARDT, Institut Pasteur, Paris
Experts:	Ms Dina KREMSDORF, Inserm U 1135, Université Pierre et Marie Curie
	Mr Bruno POZZETTO, Faculté de Médicine Jacques Lisfranc, Université Jean Monnet de Saint-Etienne (representative of the CNU)
Scientific delegate representing the HCERES:	Ms Sophie EZINE
Representative of supervising institutions and bodies:	Mr Lamine BOUBAKAR, Université de Franche-Comté
Head of Doctoral School:	Mr Thierry RIGAUD, Doctoral School n°554 “Environnements-Santé”.

1 • Introduction

History and geographical location of the unit

The research unit headed by Mr Georges HERBEIN was created in 2012. It was composed of 3 teams located on 3 different sites: the virology team of Mr Georges HERBEIN located in the center of Besançon (former Saint Jacques Hospital), the team of Mr Pierre POTHIER working on enteric virus infections at the university hospital of Dijon, and the team of Mr Patrick PLÉSIAT working on antibiotic resistance in *Pseudomonas aeruginosa* and located at the university hospital of Besançon (Minjoz) and at the Medical school, both located at a very recent healthcare and university campus of "Les Hauts du Chazal". In the future configuration, the unit will be monothematic and in a unique site, Besançon, within the campus of "Les Hauts du Chazal". The name of the unit will change to "Epigenetics of Viral Infections and Inflammatory Diseases" (EPILAB).

Management team

For the period of 2017-2021, the unit will be directed by Mr Georges HERBEIN. It will be structured into 4 themes, 2 being headed by Mr Georges HERBEIN, while the two others will respectively be headed by Mr Vincent DI MARTINO & Mr Thierry THEVENOT and Mr Eric TOUSSIROT & Mr Daniel WENDLING.

ERES nomenclature

SVE_LS3

Scientific domains

The upcoming unit will explore the molecular mechanisms involved in viral infections and inflammatory diseases. Theme 1 will be dedicated to the identification of proteins controlling HIV latency and to the identification of new molecules allowing to overcome latency. Theme 2 will explore the oncogenic potential of CMV in human mammary epithelial cells. Theme 3 will explore the prognostic value of inflammatory markers in liver cirrhosis. Finally, Theme 4 will explore epigenetic mechanisms involved in the onset and the progression of the chronic inflammatory diseases ankylosing spondylitis (AS) and rheumatoid arthritis (RA).

Unit workforce

Unit workforce	Number on 30/06/2015	Number on 01/01/2017
N1: Permanent professors and similar positions	14	7
N2: Permanent researchers from Institutions and similar positions		
N3: Other permanent staff (technicians and administrative personnel)	3	
N4: Other professors (Emeritus Professor, on-contract Professor, etc.)	2	
N5: Other researchers from Institutions (Emeritus Research Director, Postdoctoral students, visitors, etc.)	4	
N6: Other contractual staff (technicians and administrative personnel)	6	
N7: PhD students	8	
TOTAL N1 to N7	**37**	
Qualified research supervisors (HDR) or similar positions	14	

Unit record	From 01/01/2010 to 30/06/2015
PhD theses defended	6
Postdoctoral scientists having spent at least 12 months in the unit	4
Number of Research Supervisor Qualifications (HDR) obtained during the period	6

2 • Overall assessment of the unit

Introduction

In 2012, at the eve of the last 5-year plan, the unit made the ambitious bet of rassembling two virology labs and two microbiology labs in a same entity split over three different locations. They had the project to consolidate their skills in the exploration of the biology of the pathogens and the inflammatory response these pathogens may induce. For this term, the unit wishes to go back to a simpler structure with a single team located in Besançon, with 4 themes organized within viral infections and inflammatory diseases.

Global assessment of the unit

The unit plays an important role in bringing together and structuring local research in the fields of virology and inflammation, and is described by the clinicians as a reliable frame for their scientific projects.

Since the last AERES evaluation in 2010, the unit has maintained quality research, crossing several important milestones especially in the field of HIV and norovirus. The scientific production has remained abundant and several projects are operated in collaboration with local, national, and European partners, in part supported by European funding (FP7), reflecting a good level of visibility. In that context, the unit has endeavoured an abundant publication record in specialty journals and also in journals of more general interest.

The unit stands out by the value of bonds established between clinic and academic research. It is also proactively involved in teaching, with several members participating in the management of master degree courses, and teaching M.Sc. students in the fields of cellular and molecular signaling, host-graft relation, and inflammatory diseases. In parallel, the unit provides M.Sc. and PhD students with training through research.

The refocusing of the unit was an absolutely necessary step. The overall assessment is very good.

Strengths and opportunities in the context

The unit is managed by a group of talented and very motivated clinicians with original ideas and good technical skills.

It is well connected locally and is considered by the clinicians as an essential hub for their research. In that context, it has extensive access to valuable patient material and high level medical expertise.

The theme on cirrhosis appears as the strongest in terms of feasibility and manpower.

The unit also maintains connexions with European networks and sustains a very good reputation within the HIV field.

Weaknesses and threats in the context

Publications are in specialty journals, although these journals are frequently the best within their field.

The European funding is coming to an end, and the projections in terms of funding for the next 5 years is poor.

The low workforce associated with each theme of research is a clear source of concern.

The unit has not managed to attract scientists with full-time permanent research positions.

The unit does not receive any assistance from either technical or administrative staff.

The theme on CMV and breast cancer is still very fragile and has only marginally evolved since the last evaluation.

The theme addressing the role of DNA methylation in ankylosing spondylitis (AS) and rheumatoid arthritis (RA) is suffering from a clear lack of preliminary results.

Scientifically, the unit may be, for some projects, below the critical mass in terms of manpower to face fierce competition. Yet, there seems to be room for further focusing, as the future entity will still be split between 4 different themes each with only limited manpower. In this context, some clinicians associated with the unit are highly implicated in research, while others have a rather limited input due to extensive clinical activity.

Recommendations

The team has to re-evaluate the balance between tasks and manpower, probably by defining more precisely the projects of high priority and associating available staff scientists and post-doctoral fellows with these projects.

PIs should make a priority out of the recruitment of scientists with permanent positions and students, to increase the feasability of the projects.

Members have to be more pro-active in fundraising.

The unit should target more generalist journals.

The new name “Epignetics of Viral infection and inflammatory diseases” may not serve the unit well, as its strength is not in “epigenetics”, but rather in infection and inflammation. The committee recommends choosing a name not mentionning “Epigenetics”.