Research evaluation

FINAL RESUME ON THE RESEARCH UNIT:
Metabolic functional (epi)genomics and molecular mechanisms involved in type 2 diabetes and related diseases

UNDER THE SUPERVISION OF THE FOLLOWING INSTITUTIONS AND RESEARCH BODIES:
Université de Lille
Centre hospitalier régional et universitaire de Lille - Chru Lille
Centre national de la recherche scientifique - CNRS
Institut national de la santé et de la recherche médicale – Inserm
Institut Pasteur Lille

EVALUATION CAMPAIGN 2018-2019
GROUP E

Report published on March, 22 2019

In the name of Hcéres[1]:

Michel Cosnard, President

In the name of the experts committee[2]:

Hans-Ulrich Haring, Chairman of the committee

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

[1] The president of Hcéres "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 experts committee". (Article 11, paragraph 2).

Tables in this document were filled with data provided by laboratories and supervising bodies in the unit's application and in the Excel files "Données du contrat en cours" and "Données du prochain contrat".

UNIT PRESENTATION

Unit name:	Metabolic functional (epi)genomics and molecular mechanisms involved in type 2 diabetes and related diseases
Unit acronym:	n/a
Requested label:	UMR
Application type:	Restructuration
Current number:	8199
Head of the unit (2018-2019):	Mr Philippe FROGUEL
Project leader (2020-2024):	Mr Philippe FROGUEL
Number of teams:	2

EXPERTS COMMITTEE MEMBERS

Chair:	Mr Hans-Ulrich HARING, Medizinische Fakultät Tübingen, Germany
Experts:	Mr Marc AUBRY, Université de Rennes (supporting personnel)
	Mr Etienne LARGER, Université Paris Descartes (representative of CNU)
	Ms Susan OZANNE, University of Cambridge, United Kingdom
	Mr Xavier PRIEUR, Inserm Nantes (representative of Inserm CSS)
	Mr Hugues ROEST CROLLIUS, CNRS Paris (representative of CoNRS)

HCÉRES REPRESENTATIVE

Mr Jean-Paul LALLÈS

REPRESENTATIVES OF SUPERVISING INSTITUTIONS AND BODIES

Mr Raymond BAZIN, Inserm

Mr Frédéric GOTTRAND, Chru de Lille

Ms Fabienne JEAN, Institut Pasteur de Lille

Mr Domenico LIBRI, CNRS

Mr Lionel MONTAGNE, Université de Lille

INTRODUCTION

HISTORY AND GEOGRAPHICAL LOCATION OF THE UNIT

The unit is located at the Lille Pasteur institute. The unit was created in Lille in 1995, as an emerging CNRS team, by the transfer of the team from the "Centre du Polymorphisme Humain" in Paris to the Lille Pasteur institute. Subsequently, the CNRS unit became affiliated to Université Lille 2 as a University/CNRS Joint Research Unit (UMR_S 8199). In 2010, the unit contributed strongly to the Labex project "European Genomic Institute for Diabetes" and the EquipEx genomic platform LIGAN-Personalised Medicine (LIGAN-PM) that were both financed through the program "Innovation for the future".

MANAGEMENT TEAM

Director of the unit: Philippe Froguel.

HCÉRES NOMENCLATURE

SVE2_2; SVE5_1

SCIENTIFIC DOMAIN

The unit is dedicated to genetics and epigenetics of diabetes and obesity, functional genomics of diabetes and the molecular pathophysiology of diabetes by the generation and analysis of *in vivo* rodent models of metabolic diseases. The unit develops translational concepts to allow individualized therapies of obese and diabetic patients. The unit develops and manages the EquipEx LIGAN-PM genomic core lab.

UNIT WORKFORCE

	Unit workforce	
	Integrated Genomics and Metabolic Diseases Modeling	
Active staff	**Number 30/06/2018**	**Number 01/01/2020**
Full professors and similar positions	4	5
Assistant professors and similar positions	3	5
Full time research directors (Directeurs de recherche) and similar positions	1	1
Full time research associates (Chargés de recherche) and similar positions	2	5
Other scientists ("Conservateurs, cadres scientifiques des EPIC, fondations, industries, etc.")	2	2
High school teachers	0	0
Supporting personnel (ITAs, BIATSSs and others, notably of EPICs)	26	27
Permanent staff	**38**	**45**
Non-permanent professors and associate professors, including emeritus	0	

Non-permanent full time scientists, including emeritus, post-docs	6	
PhD Students	4	
Non-permanent supporting personnel	16	
Non-permanent staff	**22**	
Total	**60**	

GLOBAL ASSESSMENT OF THE UNIT

The unit is considered to be one of the world leading laboratories addressing the genetic architecture of obesity and type 2 diabetes. This statement was the key result of the preceding evaluation in 2013. However, the 2013 review identified a number of issues that were thought to further improve the excellent quality of the unit. In the meantime, the head of the unit has responded to these recommendations and has initiated a number of changes with respect to the institutional structure and the faculty which have clearly further strengthened the visibility and the standing of the unit in the scientific field.

Research of metabolic diseases has tremendously profited from the results of genome-wide association studies which provided hundreds of novel genes which might contribute to the pathogenesis of these diseases. The next, however more difficult task is now to understand the biology behind these genes. The measures initiated by the head of the unit will prepare it to face this challenge and to stay at the forefront in the field of metabolic diseases.

Among many other scientific achievements, the unit has essentially contributed to the understanding of the control of body weight regulation via the leptin receptor-MC4R axis. This has paved the way to a more personalized therapy of obese patients carrying a rare mutation in the MC4R. This is proof of principle that the unit follows a successful translational concept of research. A particular strength of the unit is the development of methods which allow the implementation of the concept in clinical practice.

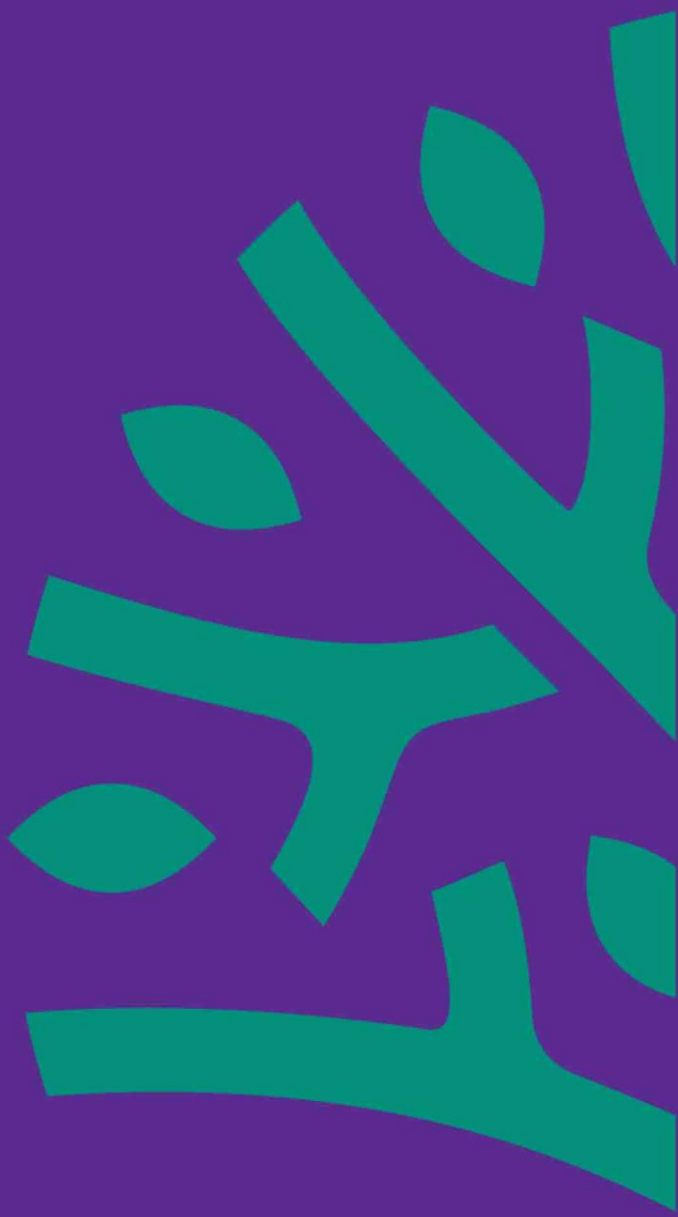
Overall, the unit has an impressive scientific output and is world leading in genetics of metabolic diseases and their translation into prediction, prevention and therapy of diabetes and obesity. The unit is publicly visible and uses the popularity of its head for fundraising, thereby efficiently supporting translational concepts. The unit is attractive for international PhD students, visiting fellows and postdocs, for example with schemes in place to provide support for initial accommodation costs when moving to Lille. Young investigators have excellent opportunities to shape their own scientific carriers thanks to their excellent publications.

The unit provides excellent opportunities for researchers of all ages and genders. The unit´s life is well organized and allows vivid exchange of data and ideas.

The scientific strategy of the unit is excellent and will provide clinically relevant results for personalized therapy of metabolic diseases.

The evaluation reports of Hceres
are available online : www.hceres.com

Evaluation of clusters of higher education and research institutions
Evaluation of higher education and research institutions
Evaluation of research
Evaluation of doctoral schools
Evaluation of programmes
International evaluation and accreditation



2 rue Albert Einstein
75013 Paris, France
T. 33 (0)1 55 55 60 10