HCERES

High Council for the Evaluation of Research and Higher Education

Department of Research Evaluation

report on research unit:

Infection and Epidemiology Department

INFEPI

under the supervision of the following institutions and research bodies:

Institut Pasteur

Centre National de la Recherche Scientifique - CNRS

Université de Versailles Saint-Quentin-en-Yvelines - UVSQ

Evaluation Campaign 2016-2017 (Group C)

HCERES

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In the name of HCERES,[1]

Michel Cosnard, president

In the name of the experts committee,[2]

Henk Haagsman, 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:	Infection and Epidemiology Department
Unit acronym:	INFEPI
Label requested:	-
Current number:	-
Name of Director (2016-2017):	Ms Marie-Lise GOUGEON
Name of Project Leader (2018-2022):	Ms Marie-Lise GOUGEON

Expert committee members

Chair:	Mr Henk HAAGSMAN, Faculty of Veterinary Medicine, Utrecht University, The Netherlands
Experts:	Mr Marc BAGUELIN, London School of Hygiene & Tropical Medicine, UK
	Mr François BALLOUX, UCL Genetics Institute, UK
	Mr Ian FEAVERS, National Institute for Biological Standards and Control, Hertfordshire, UK
	Mr Stephan GÜNTHER, Bernhard Nocht Institut für Tropenmedizin, Hamburg, Germany
	Ms Samira LAOUIREM, Centre de Recherche sur l'Inflammation, Hôpital Beaujon, Clichy (representative of supporting personnel)
	Mr Antonio OSUNA, Instituto de Biotecnologia, Faculdad Ciencias Universidad de Granada, Spain
	Ms Savita PAHWA, University of Miami Miller School of Medicine, Florida, USA
	Mr Mervyn SINGER, Bloomsbury Institute of Intensive Care Medicine, UCL, London, UK
	Mr Heiman WERTHEIM, Radboud University, The Netherlands
Scientific delegate representing the HCERES:	
	Ms Catherine SCHUSTER

Representatives of supervising institutions and bodies:

Mr Alexis CONSTANTIN, Université de Versailles Saint-Quentin-En-Yvelines

Mr Alain ISRAËL, Institut Pasteur Paris

Heads of Doctoral Schools:

Mr Dominique COSTAGLIOLA, ED n°393, "Santé publique: épidémiologie et sciences de l'information biomédicale"

Ms Emmanuèle MOUCHEL-VIELH, ED n°515, "Complexité du Vivant"

Ms Sylvie VAN DER WERF, ED n°516, "Biochimie, Biothérapies, Biologie Moléculaire et Infectiologie (B3MI)"

1 • Introduction

History and geographical location of the unit

The Infection and Epidemiology Department was created in 2005. It is one of 11 departments of the Pasteur Institute in Paris and comprises 12 research teams. The department has seen some changes since the last evaluation. Two teams have been re-created, two teams were closed, two teams were created and two teams were moved. One of the teams is part of the CNRS URA 3012 directed by Mr Luis QUINTANA-MURCI, another forms a mixed unit with Université de Versailles Saint-Quentin-en-Yvelines. Six teams of the department are partners of the LabEx Integrative Biology of Emerging Infectious Diseases (IBEID) coordinated by Pasteur Institute (Ms Pascale COSSART and Mr Philippe SANSONETTI). The teams of the department are housed at the Pasteur Institute campus in 8 different buildings, except one team that is housed in part at the Université de Versailles Saint-Quentin-en-Yvelines, and another team that is housed at the Hôpital Cochin.

Management team

The department is headed by Ms Marie-Lise GOUGEON deputised by Mr Fabrice CHRÉTIEN.

HCERES nomenclature

SVE6 Santé Publique, Épidémiologie, Recherche Clinique

SVE2 Biologie Cellulaire, Imagerie, Biologie Moléculaire, Biochimie, Génomique, Biologie Systémique, Développement, Biologie Structurale

SVE3 Microbiologie, Immunité

SVE4 Neurologie

SVE5 Physiologie, Physiopathologie, Cardiologie, Pharmacologie, Endocrinologie, Cancer, Technologies Médicales

SHS2_3 Anthropologie et Ethnologie

SHS2_4 Sociologie, démographie

ST1 Mathématiques

Scientific domains

The Infection and Epidemiology Department interests focus on epidemiology and modelling, field research, host-pathogen interactions, diagnosis and therapies as well as public health activities. It hosts National Reference Centres and WHO collaborating centres.

Unit workforce

Unit workforce	Number on 30/06/2016	Number on 01/01/2018
N1: Permanent professors and similar positions	19	17
N2: Permanent researchers from Institutions and similar positions	29	29
N3: Other permanent staff (technicians and administrative personnel)	63 (61,85 FTE)	64 (62,85)
N4: Other researchers	23	
N5: Emeritus	0	
N6: Other contractual staff (technicians and administrative personnel)	13	
N7: PhD students	30	
TOTAL N1 to N7	**177 (176,85 FTE)**	
Qualified research supervisors (HDR) or similar positions	32	

Unit record	From 01/01/2011 to 30/06/2016
PhD theses defended	30
Postdoctoral scientists having spent at least 12 months in the unit	35
Number of Research Supervisor Qualifications (HDR) obtained during the period	10

2 • Assessment of the unit

Global assessment of the unit

The main scientific interests of the Infection and Epidemiology Department are field research, epidemiology, modelling, host-pathogen interactions, diagnosis and therapies. The changes performed since the last evaluation did not result in the formation of a more homogeneous department; the heterogeneity may even be higher than before. Recently, the department recruited excellent young scientists as team leaders who are expected to bring the research of their teams to high levels. The teams are still uneven with respect to scope and size. As, in addition, the quality and impact of research differ considerably between the teams, it is hard to provide a general judgement for the department as such. Collaborations within the department and with the other departments of the Pasteur Institute are limited.

The presence of National Reference Centres and WHO collaborating centres within the teams is important to perform cutting-edge research. However, research does not always benefit from these assets. This could be improved in some teams. Moreover, the balance of public health tasks and research could be better in some cases. Some teams rely too heavily on the quality and achievements of a single individual. This dependency makes teams vulnerable. More general, the department lacks a clear vision and a strategy to cope with future challenges. The direction of research seems to be determined by excellent researchers who move from breakthrough to breakthrough within their own research field and

expertise. This may be the result of the philosophy of the Pasteur Institute. The scientific output, both qualitatively and quantitatively is excellent.

The societal impact of the work in the unit is very good. Members of the unit have undertaken many activities, nationally and internationally, aiming at education and communication *via* the media and concerning many aspects of infectious diseases. Members of the unit filed 24 international patents. However, the transfer of intellectual property to companies is not optimal.

The unit is a very good training environment for PhD students and postdocs. Teams of the department are actively involved in teaching the Master in Public Health led by the Pasteur-CNAM School of Public Health. They created various MOOCs. The unit is very effectively organised and led. At the group leader level, the unit has a very skewed gender balance.

The goal of the department is to become a leading institute for emerging and recurrent diseases. However, the strategic objectives and outlook of the department are a reflection of the specific research questions of the teams. An all-encompassing departmental vision and strategy is lacking. The department should be shaped towards future needs and crucial research areas should be safeguarded.