

# HCERES

High Council for the Evaluation of Research  
and Higher Education

Department of Research Evaluation

report on research unit:

Infectiology and Public Health

ISP

Under the supervision of  
the following institutions  
and research bodies:

Institut National de la Recherche Agronomique - INRA

Université François-Rabelais de Tours

Evaluation Campaign 2016-2017 (Group C)

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

Michel Cosnard, president

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

Xavier Nesme, 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 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:	Infectiology and Public Health
Unit acronym:	ISP
Label requested:	Renewal
Current number:	1282
Name of Director (2016-2017):	Ms Nathalie WINTER
Name of Project Leader (2018-2022):	Ms Nathalie WINTER

## Expert committee members

Chair:	Mr Xavier NESME, INRA (representative of supporting personnel)
Experts:	Ms Marie-José BUTEL, Université Paris Descartes (representative of the CNU)
	Mr Andrew HEMPHILL, University of Berne, Switzerland
	Ms Jayne HOPE, University of Edinburgh, United-Kingdom
	Mr Jim KAUFMAN, University of Cambridge, United-Kingdom
	Mr Nicolas LAPAQUE, INRA
	Ms Véronique MONNET, INRA (representative of the CSS INRA)
	Mr Alain VANDERPLASSCHEN, Université de Liège, Belgium

### Scientific delegate representing the HCERES:

Mr Jean-François HOCQUETTE

### Representatives of supervising institutions and bodies:

Ms Sylvie DEQUIN, INRA, MICA division  
 Mr Emmanuel LESIGNE, UFRT  
 Mr Thierry PINEAU, INRA, Animal Health Division

### Head of Doctoral School:

Mr Thierry MOREAU, ED n° 549, "Santé, Sciences Biologiques et Chimie du Vivant"

## 1 • Introduction

### History and geographical location of the unit

The very large unit (*Très Grande Unité*, TGU) “Infectiology and Public Health” (ISP N° 1282) is a Joint Research Unit (JRU) between the French National Institute for Agricultural Research (INRA) and the University François Rabelais of Tours (UFRT), created on January 1<sup>st</sup> 2012 to compose a joint large unit dedicated to the study of infectious diseases of animals and humans. Teams are located either in Nouzilly (INRA staff mainly), which is part of the INRA Val de Loire Center or at the pharmacy and medicine faculty campus (UFRT staff mainly) in Tours, 25 km from Nouzilly.

### Management team

At its creation, the ISP director was Ms Dominique BUZONI-GATEL (INRA) and Ms Nathalie WINTER and Mr Pierre COURSAGET (UFRT) were deputy directors. Mr Laurent MEREGHETTI (UFRT) replaced Mr Pierre COURSAGET in September 2012. On June 30<sup>th</sup> 2015, Ms Dominique BUZONI-GATEL left and Ms Nathalie WINTER was appointed as director with Mr Laurent MEREGHETTI as deputy directors.

### HCERES nomenclature

Principal: SVE3 Microbiologie, Immunité

Secondaries: SVE2 Biologie cellulaire, Imagerie, Biologie Moléculaire, Biochimie, Génomique, Biologie Systémique, Développement, Biologie Structurale ; SVE6 Santé Publique, Épidémiologie, Recherche Clinique ; SVE1 Agronomie, biologie Végétale, Écologie, Environnement, Évolution

### Scientific domains

ISP develops research activities on infectious diseases in relation with the “One Health” concept that encourages interdisciplinarity between the medical and veterinary disciplines. Through the study of interactions between the host and the pathogen, ISP seeks to develop strategies for disease prevention and control. It focuses on highly pathogenic bacterial, parasitic and viral diseases, which have an economic impact on livestock and are likely to affect human health.

## Unit workforce

Unit workforce	Number on 30/06/2016	Number on 01/01/2018
N1: Permanent professors and similar positions	29	20
N2: Permanent researchers from Institutions and similar positions	37	35
N3: Other permanent staff (technicians and administrative personnel)	85	79
N4: Other researchers (Postdoctoral students, visitors, etc.)	5	
N5: Emeritus	3	
N6: Other contractual staff (technicians and administrative personnel)	2	
N7: PhD students <sup>1</sup>	16	
<b>TOTAL N1 to N7</b>	<b>177</b>	
Qualified research supervisors (HDR) or similar positions <sup>2</sup>	40	

Unit record	From 01/01/2011 to 30/06/2016
PhD theses defended <sup>3</sup>	51
Postdoctoral scientists having spent at least 12 months in the unit <sup>4</sup>	7
Number of Research Supervisor Qualifications (HDR) obtained during the period	9

<sup>1</sup> PhD students from team T0 that did not defend before 31/12/2016 were excluded.

<sup>2</sup> includes 3 HDR present between June and December 2016. For the next contract, 4 HDR from team T0 will leave the JRU.

<sup>3</sup> Includes 7 PhD students who defended between June and December 2016.

<sup>4</sup> In addition 3 postdocs spent between 3 and 12 months, two senior scientists more than 12 months and 3 between 3 and 12 months.

## 2 • Assessment of the unit

### Global assessment of the unit

In the frame of the One Health concept that postulates a *continuum* from animal health to human health, the ISP JRU was created by merging INRA teams that focused on animal infections and UFRT teams that focused on human infections. Obviously, after this first contract, this challenging operation of merging is a success. The localization of teams on different sites and buildings still remain a constraint, and interactions between teams must be reinforced to ensure a shared agreement about the main objectives of the research realized within ISP. The scientific production of ISP is of quality with major issues in relevant journals, with the recommended objective for the coming period to increase publications in the upper journal groups. In this respect, there is a need to get a more global view of the pathogen-host interactions, which would allow the identification of new genes/proteins/metabolites involved in these interactions. ISP is surrounded by an exceptional set of facilities and benefits of an important administrative team. It is dynamic and very concerned by applications of research results, and is thus largely open to the socio-economic environment especially in direction of breeders and decision-makers for the questions of zoonotic threat and antibiotic-resistance. Because the public opinion concerning experiments involving animals and livestock is evolving a lot and because these two aspects are central for the JRU activities, ISP should organize a collective reflection on these topics to inform future research orientations. ISP is supported by the French Région Centre and benefits from the Research Federation (*Fédération de Recherche en Infectiologie*, FÉRI). It is very active at the European level participating in or coordinating several collaborative researches. Its academic reputation also plays a role together with the strong involvement of the teacher-researchers of ISP to create the Erasmus Mundus Joint Master degree IDOH. While ISP is already attractive for PhD students, this international master degree will definitively place ISP as an international reference in research and teaching in infectiology.