

# HCERES

High Council for the Evaluation of Research  
and Higher Education

Research units

HCERES report on research unit:

Hemodynamics, Interaction, Fibrosis, tumor  
Invasiveness, in Hepatic and digestive organs

HIFIH

Under the supervision of  
the following institutions  
and research bodies:

Université d'Angers - UA

# HCERES

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and Higher Education

Research units

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

Michel COSNARD, president

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

Frederik NEVENS, chairman of the committee

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Under the decree N<sup>o</sup>.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:	Hemodynamics, Interaction, Fibrosis, tumor Invasiveness, in Hepatic and digestive organs
Unit acronym:	HIFIH
Label requested:	EA
Current number:	EA 3859
Name of Director (2015-2016):	Mr Paul CALÈS
Name of Project Leader (2017-2021):	Mr Paul CALÈS

## Expert committee members

Chair:	Mr Frederik NEVENS, University of Leuven, Belgium
Experts:	Mr Jean-François DUFOUR, University of Bern, Switzerland Mr Juan-Carlos GARCIA PAGAN, Hospital Clínic Provincial de Barcelona, Spain
Scientific delegate representing the HCERES:	Mr Jean ROSENBAUM
Representative of supervising institutions and bodies:	Mr Jean-Paul SAINT-ANDRÉ, University of Angers
Head of Doctoral School:	Mr Frank BOURY, Doctoral school n° 502 "Biologie-Santé"

## 1 • Introduction

### History and geographical location of the unit

The unit has been created in 1994 and has been always under the direction of Mr Paul CALÈS. It is located in the University of Angers campus, in a recent building.

### Management team

The laboratory is under the direction of Mr Paul CALÈS

### HCERES nomenclature

SVE1\_LS7 Épidémiologie, santé publique, recherche clinique, technologies biomédicales

### Scientific domains

Non-invasive markers of liver fibrosis, viral hepatitis, non-alcoholic fatty liver disease, portal hypertension, digestive oncology.

## Unit workforce

Unit workforce	Number on 30/06/2015	Number on 01/01/2017
N1: Permanent professors and similar positions	11	13
N2: Permanent researchers from Institutions and similar positions		
N3: Other permanent staff (technicians and administrative personnel)	16	16
N4: Other professors (Emeritus Professor, on-contract Professor, etc.)		
N5: Other researchers from Institutions (Emeritus Research Director, Postdoctoral students, visitors, etc.)		
N6: Other contractual staff (technicians and administrative personnel)	7	
N7: PhD students	11	
TOTAL N1 to N7	45	
Qualified research supervisors (HDR) or similar positions	8	

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	3

## 2 • Overall assessment of the unit

### Introduction

The main focus of the unit has already been for some time research on the non-invasive assessment of fibrosis. Whereas this research was mainly focused on HCV-induced liver disease, it has recently shifted to the study of Non-Alcoholic Fatty Liver Disease (NAFLD). However, the unit also works on several topics within the field of hepatology and gastroenterology.

### Global assessment of the unit

The most extensive research output comes from the development and validation of non-invasive diagnostic tests for the assessment of liver fibrosis and more recently NAFLD. Some of these data have been published in highly ranked journals, are well recognized and are clinically useful. The unit is also involved in a large number of other topics for which their production and reputation are less strong. A strong point is the involvement in technology transfer with many patents (with licenses and royalties), a first start-up company already transferred in 2012 to Echosens and a second one planned to be launched.

The involvement in training is low with few PhD students and, more important, no post-doctoral fellows. The willingness to reduce the number of themes should be accompanied by a better-defined strategy in order to reach this aim and should make room for mechanistic studies.

### Strengths and opportunities in the context

Strong involvement in patenting and technology transfer.

Very good recognition in the field of non-invasive diagnosis and prognosis of liver disease.

Loyal and committed staff.

Multidisciplinary staff.

### Weaknesses and threats in the context

The unit is very dependent on its leader and the switch in the direction is a challenge that must be well prepared.

There are too many research programs.

The lab is missing PhD students and post-doctoral fellows.

Some parts of the program (viral hepatitis) might not be sustainable in a competitive environment.

### Recommendations

Decrease the number of themes in order to concentrate on promising topics.

Address not only clinical issues but also mechanisms.

Try to build a core of basic science by recruiting PhD students and experimented post-docs with a scientific background (not only medical doctors).