

High Council for the Evaluation of Research and Higher Education

Department of Research Evaluation

## report on research unit:

Institute of Mediterranean Neurobiology INMED

under the supervision of the following institutions and research bodies:

Aix-Marseille Université

Institut National de la Santé Et de la Recherche Médicale - INSERM



# High Council for the Evaluation of Research and Higher Education

Department of Research Evaluation

In the name of HCERES,1

Michel Cosnard, president

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

Michael Hausser, chairman of the committee

Under the decree  $N_{\circ}.2014\text{--}1365$  dated 14 november 2014,

<sup>&</sup>lt;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>&</sup>lt;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: Institute of Mediterranean Neurobiology

Unit acronym: INMED

Label requested:

Current number: UMRS 901

Name of Director

(2016-2017): Mr Alfonso Represa

Name of Project Leader

(2018-2022): Ms Rosa Cossart

## Expert committee members

Chair: Mr Michael Hausser, University College London, United Kingdom

Experts: Mr Alberto Bacci, Institut du Cerveau et de la Moelle épinière, Hôpital

Universitaire Pitié-Salpêtrière

Ms Beverley CLARK, University College London, United Kingdom

Mr Ludovic Galas, INSERM (representative of supporting personnel)

Ms Patricia GASPAR, Institut du Fer à Moulin, INSERM-UPMC, Paris

Mr Anthony Isles, Cardiff University, United Kingdom

Mr Régis Lambert, Université Pierre et Marie Curie (representative of CNU)

Mr Pascal LEGENDRE, Université Pierre et Marie Curie

Mr Fabrice Wendling, Université de Rennes 2

Scientific delegate representing the HCERES:

Mr Christian GIAUME, Collège de France

Representatives of supervising institutions and bodies:

Mr Pierre Chiappetta, Aix-Marseille Université

Ms Meriem MAROUF, INSERM

Ms Aurélie Philippe, INSERM

Head of Doctoral School:

Mr Philippe NAQUET, ED n° 62, "Science de la Vie et Santé"

#### 1 • Introduction

#### History and geographical location of the unit

The Institute of Mediterranean Neurobiology (INMED) is a neuroscience centre affiliated to INSERM and Aix-Marseille University located on the Luminy campus. It was founded by Mr Yehezkel Ben-Arı in 1999. The institute has been directed by Mr Alfonso Represa since 2009, a time when INMED progressed from an INSERM unit to a research centre (in 2012).

#### Management team

In the future (2018-2022), this institute is proposed to be directed by Ms Rosa COSSART.

#### **HCERES** nomenclature

Domaine disciplinaire principale:

SVE4 Neurologie.

Domaine disciplinaire secondaire:

- SVE2 Biologie Cellulaire, Imagerie, Biologie Moléculaire, Biochimie, Génomique, Biologie
  Systémique, Développement, Biologie Structurale;
- SVE5 Physiologie, Physiopathologie, Cardiologie, Pharmacologie, Endocrinologie, Cancer, Technologies Médicales.

#### Scientific domains

The scientific domains are focused on neuroscience, cellular and systems biology, development, physiology, physiopathology and pharmacology.

#### Unit workforce

Unit workforce	Number on 30/06/2016	Number on 01/01/2018
N1: Permanent professors and similar positions	7	7
N2: Permanent researchers from Institutions and similar positions	30	33
N3: Other permanent staff (technicians and administrative personnel)	23	25
N4: Other researchers (Postdoctoral students, visitors, etc.)	28	
N5: Emeritus	0	
N6: Other contractual staff (technicians and administrative personnel)	15	
N7: PhD students	26	
TOTAL N1 to N7	129	
Qualified research supervisors (HDR) or similar positions	18	

Unit record	From 01/01/2011 to 30/06/2016
PhD theses defended	29
Postdoctoral scientists having spent at least 12 months in the unit	42
Number of Research Supervisor Qualifications (HDR) obtained during the period	9

#### 2 • Assessment of the unit

#### Global assessment of the unit

The main scientific objectives of INMED are the study of the development and plasticity of the brain and the pathologies of brain development. The brain areas being studied most intensely include the cerebral cortex and hippocampal formation, and the diseases of interest include epilepsy, cortical developmental disorders, Parkinson's disease, and other developmental syndromes such as Fragile-X, autism and Prader-Willi syndromes. These questions are being addressed using a wide range of approaches, including genetic manipulations, anatomical techniques, slice and *in vivo* electrophysiology, slice and *in vivo* imaging, complex behavioral tasks, in combination with mathematical modelling. Since the last evaluation report (2011), the scientific focus of INMED has shifted more strongly towards the study of the functional dynamics of neural circuits in the intact brain using the mouse as a model system. This has been strengthened by consolidation of existing groups, as well as by recruitment of new groups.

INMED is one of the most successful and internationally visible institutes in the field of neuroscience. It is competitive with the best neuroscience institutes worldwide, and it has an outstanding international reputation. What is particularly distinctive about INMED is its scientific focus and the complementarity of the questions being addressed by the different groups, which creates dynamism and genuine synergy within the institute. The institute has proven to be highly productive over the past review period, with scientific output exhibiting a very high level of creativity and scientific rigor. With the transition to a young and dynamic new research director, a restructuring of the teams combined with new recruitment, and a compelling research vision, this institute is poised for an exciting period of discovery in the years ahead.