

# INEM - Immunologie et neurogénétique expérimentales et moléculaires

Rapport Hcéres

#### ▶ To cite this version:

Rapport d'évaluation d'une entité de recherche. INEM - Immunologie et neurogénétique expérimentales et moléculaires . 2017, Université d'Orléans, Centre national de la recherche scientifique - CNRS. hceres-02030006

#### HAL Id: hceres-02030006 https://hal-hceres.archives-ouvertes.fr/hceres-02030006

Submitted on 20 Feb 2019

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



# High Council for the Evaluation of Research and Higher Education

Department of Research Evaluation

### report on research unit:

Experimental and Molecular Immunology and

**Neurogenetics** 

INEM

under the supervision of the following institutions and research bodies:

Centre National de la Recherche Scientifique - CNRS Université d'Orléans



#### 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,2

Fabio Martinon, chairman of the committee

Under the decree No.2014-1365 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>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.

Experimental and Molecular Immunology and Neurogenetics Unit name:

INEM Unit acronym:

UMR CNRS - Université d'Orléans Label requested:

7355 Current number:

Name of Director (2016-2017):

Ms Valérie Quesniaux

Name of Project Leader Ms Valérie QUESNIAUX (2018-2022):

## Expert committee members

Mr Fabio Martinon, University of Lausanne, Switzerland Chair:

**Experts:** Mr Etienne AUDINAT, Université Paris Descartes

Mr Dominique Bonneau, CHU et Université d'Angers

Mr Jean Dayoust, Université Paris Descartes (representative of the CoNRS)

Ms Christine Delprat, Université Claude Bernard Lyon 1 (representative of the

CNU)

Ms Hélène GARY, Université Paris-Sud (representative of supporting personnel)

Mr Jean-Louis HERRMANN, UFR des Sciences de la Santé Simone Veil

Scientific delegate representing the HCERES:

Ms Sophie EZINE

Representatives of supervising institutions and bodies:

Mr Éric Buffenoir, CNRS

Mr Ioan Todinca, Université d'Orléans

Head of Doctoral School:

Mr Luigi Agrofoglio, ED n°549, « Santé, Sciences Biologiques et Chimie du

Vivant » (co-accréditée Orléans/Tours)

#### 1 • Introduction

#### History and geographical location of the unit

The research unit was created in 2001 and became UMR 6218 in 2006. The unit's initial focus was on molecular immunology and embryology. In 2009, the team "Embryology" was replaced with a "Neurogenetics" team, leading to the creation in 2012 of the unit "Experimental and Molecular Immunology and Neurogenetics" (INEM, UMR7355). INEM is the focus of this evaluation.

The unit is located on the Orléans CNRS campus. The direct environment is multidisciplinary with little additional research in life sciences. UMR 7355 is part of the Transgenose Institute, that also includes the CNRS service unit in mouse transgenesis TAAM (UPS44). Two spin-off companies are linked to INEM (Artimmune and Kaerus Bioscience).

INEM is organized into 2 teams: team 1, Immune responses to infection and injury, and team 2, Neurogenetics.

#### Management team

The unit is headed by Ms Valérie QUESNIAUX.

#### **HCERES** nomenclature

SVE1\_LS3

#### Scientific domains

The unit domains are immunity and neurology. Research in immunology focuses on aspects of innate immunity and inflammation. The focus on Neurology is on genetic alterations impacting the neurological system, in particular the role of the mRNA translation regulator FMR1 in regulating channels possibly involved in intellectual disability. Another domain of interest is on the impact of environmental toxins on neurotoxicity and possibly inflammation.

#### Unit workforce

Unit workforce	Number on 30/06/2016	Number on 01/01/2018
N1: Permanent professors and similar positions	8	8
N2: Permanent researchers from Institutions and similar positions	5	5
N3: Other permanent staff (technicians and administrative personnel)	10 (7.7 FTE)	10 (7.7)
N4: Other researchers (Postdoctoral students, visitors, etc.)	3	
N5: Emeritus	2	
N6: Other contractual staff (technicians and administrative personnel)	4	
N7: PhD students	9	
TOTAL N1 to N7	41	
Qualified research supervisors (HDR) or similar positions	8	

Unit record	From 01/01/2011 to 30/06/2016
PhD theses defended	10
Postdoctoral scientists having spent at least 12 months in the unit	14
Number of Research Supervisor Qualifications (HDR) obtained during the period	2

#### 2 • Assessment of the unit

#### Global assessment of the unit

The unit tackles a very diverse number of scientific questions focused on inflammation targeted both in the immune and nervous systems. Since the last evaluation report in 2010, the unit was reorganized with the addition of new groups; however the main themes and strategies were maintained. ArtImmune, a Spin-off created in 2010 has a strong partnership with INEM and focused on deciphering specific aspect of asthma. INEM has a very prolific amount of publications, including many publications resulting from collaborations that highlight the contribution of this unit beyond their specific research themes. The committee noticed also an excellent capacity to obtain external grants as illustrated by a steadily increasing amount of funds in recent years. However, most of the research topics are sound, very diversified and synergies among the projects could be improved. Similar comments were made during the previous evaluation. This may have diluted the efforts on some of the most promising projects. A more focused and detailed investigation on a few specific projects could have increased their impact and the impact factor of some of the resulting publications. The general assessment of the unit is very good to excellent, the scientific production was very good in the period reviewed and the future prospects are very promising. The addition to the unit of a group within team 1 led by a new member is proposed. This group has recently identified altered expression of an enzyme involved in purine metabolism as a risk factor for autism spectrum disorders (ASDs). Joining INEM will allow this group to access the tools and expertise necessary to investigate the role of the perturbation of this pathway, including inflammation, in neurological disorders, and will augment the synergistic interactions between the neuro and immuno branches of INEM.