GIN - Institut des neurosciences de Grenoble

Rapport Hcéres

HCERES

High Council for the Evaluation of Research and Higher Education

Research units

HCERES report on research unit:

Grenoble Institute of Neurosciences

GIN

Under the supervision of the following institutions and research bodies:

Université Joseph Fourier - Grenoble - UJF

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

Evaluation Campaign 2014-2015 (Group A)

HCERES

High Council for the Evaluation of Research and Higher Education

Research units

In the name of HCERES,[1]

Didier HOUSSIN, president

In the name of the experts committee,[2]

André GOFFINET, 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 result of the evaluation by the experts committee, the composition of which is specified below.

The assessments contained herein are the expression of an independent and collegial deliberation of the committee.

Unit name:	Grenoble Institute of Neurosciences
Unit acronym:	GIN
Label requested:	INSERM
Present no.:	U836
Name of Director (2014-2015):	Mr Claude FEUERSTEIN (2007/09/30 – 2013/09/30) Mr Frédéric SAUDOU (2013/09/30 – Present)
Name of Project Leader (2016-2020):	Mr Frédéric SAUDOU

Expert committee members

Chair:	Mr André GOFFINET, University of Louvain, Belgium
Experts:	Mr Luc BUÉE, University of Lille Ms Bénédicte DARGENT, CRN2M, Marseille Ms Agnès FICHARD-CARROLL, University of Montpellier Mr Christian POÜS, University Paris-Sud, Chatenay-Malabry Mr Alfons SCHNITZLER, University Düsseldorf, Germany Mr John WADDINGTON, Royal College of Surgeons, Dublin, Ireland

Scientific delegate representing the HCERES:

Mr Jean-Marie ZAJAC

Representatives of the unit's supervising institutions and bodies:

Ms Christelle BRETON (representative of the Doctoral school N°218)

Mr Éric DEFRANCQ, Université Joseph Fourier

Mr Jérôme GARIN, CEA

Ms Anne GUÉRIN-DUGUE (representative of the Doctoral school N°216)

Ms Jacqueline HUBERT, CHU Grenoble

Ms Anne ROCHAT, INSERM

1 • Introduction

History and geographical location of the unit

Research Centre in January 2007. It was a strategic project jointly initiated by Grenoble 1 Joseph Fourier University (UJF) and the national research agencies dedicated to Life and Health Sciences, such as Inserm, CEA and, more recently, CNRS. Directed by Mr Claude FEUERSTEIN, it gathered the local forces in Neurosciences within a common and unique location organized around shared facilities. The common building devoted to experimental research covers a 6000 m^2 overall area. It was completed and inaugurated in November 2007. Built by UJF on the University Hospital Centre (CHU) campus, this building is located at the immediate proximity of the Hospital Departments of Neurology, Magnetic Resonance Imaging (MRI), Neurosurgery, Psychiatry and Clinical Investigation Centre (CIC). This location is incentive for strong interactions between clinical and experimental research. Moreover, the presence in Grenoble of many high levels Research Centers from various institutions (University, Inserm, CNRS, CEA) is a unique opportunity for the development of trans-disciplinary projects with physicists, mathematicians, engineers, structural biologists, physicians, psychologists, etc…).

The GIN will start the 2016-2020 project with a new direction and with 11 different teams studying Neuroscience along 3 different complementary and interacting approaches: cellular and molecular Neurosciences, Neuroimaging, systems and clinical Neurosciences. With the help of innovative technologies such as state of the art imaging techniques, these teams address various biological questions centered on: the cell biology of the neuron - cytoskeleton, intracellular trafficking, cell polarity- in normal and pathological conditions; communication and plasticity at neuronal synapses and neuromuscular junctions; normal and pathological brain development, neuroimaging and the functions of physiological and pathological neural networks. Clinical concerns are related to diseases resulting from neural injuries (neurodegenerative diseases and stroke), epilepsies, mental diseases and cognition, brain tumors and myopathies. The interface between basic and clinical teams and through multidisciplinary approaches such as nano-technologies, physics, chemistry and informatics will be crucial to develop future therapeutic strategies.

Management team

Mr Claude FEUERSTEIN chaired the GIN since its creation in 2007 until September 2013. In early 2013, Inserm and UJF launched an International call to recruit a new director for the GIN. Mr Frédéric SAUDOU, Inserm research director (DR1) and director of the "Signaling, Neurobiology and Cancer" INSERM U1005, CNRS UMR3306 unit at the Institut Curie was selected and then nominated as interim director of the GIN on September 23, 2013 to prepare the 2016-2020 project of the GIN.

To assist the director in managerial task and administrative duties, a deputy director was nominated in the Spring 2014 and took function in September 2014. She will assist the director in building and establishing partnerships, managing support scientific and technical resources, and implementing the science policy elaborated by the management committee.

HCERES nomenclature

SVE_LS5

SVE1_LS7

Unit workforce

Unit workforce	Number as at 30/06/2014	Number as at 01/01/2016
N1: Permanent professors and similar positions	32	34
N2: Permanent researchers from Institutions and similar positions	33	38
N3: Other permanent staff (without research duties)	34	25
N4: Other professors (Emeritus Professor, on-contract Professor, etc.)		
N5: Other researchers (Emeritus Research Director, Postdoctoral students, visitors, etc.)	9	14
N6: Other contractual staff (without research duties)	16	4
TOTAL N1 to N6	**124**	**115**

Unit workforce	Number as at 30/06/2014	Number as at 01/01/2016
Doctoral students	94	
Theses defended	46	
Postdoctoral students having spent at least 12 months in the unit	6	
Number of Research Supervisor Qualifications (HDR) taken	42	
Qualified research supervisors (with an HDR) or similar positions	54	58

2 • Overall assessment of the unit

Global assessment of the unit

The GIN and its different teams represent group of first class research teams in Neuroscience. To avoid installation of routine, it was deemed necessary to adapt and refocus the GIN on modern aspects. Although still ongoing, this is basically accomplished with a modern organizational matrix structure, by the introduction of new thematics introduced by the new director and associated teams, and by restructuring of previous GIN teams. Research carried out by the different teams has been rated from outstanding to good, with an average of very good to excellent. With appropriate focus on their strengths, which are quite impressive, all teams are in a position and very determined to increase their impact on the international scene, which should occur progressively during the coming 5 years.

Strengths and opportunities in relation to the context

Since 2007, the GIN has maintained international reputation in some fields such as deep brain stimulation, the molecular biology of microtubules, vesicular trafficking in neurons and others. Like in many other similar instances, a time comes when a new impetus must be given to introduce new thematics, to modify and redirect existing ones. This is still under way but thus far reforms have been extremely successful in bringing together 11 teams (4 new teams since 2010, including two in 2014) with exceptional expertise in their respective fields. The novel structure, with its matrix organisation in teams and platforms, to which all present GIN members have worked and adhere, provides team leaders and their collaborators with a superb opportunity to make top-notch contributions in neuroscience. By focusing on what they do best and interacting in a positive and intelligent manner, researchers at the GIN are clearly in a position to publish at a high level during the next 5 years and thereby make an international impact.

Weaknesses and threats related to the context

Although the general level is very good, the scientific output of some teams over the last few years has not been excellent. The reasons for this are diverse but include some lack of horizontal communications among team leaders and some deficiency in interactions and of research programs. Some difficulties have been associated with the change of leadership and accompanying administrative modifications. This is now basically over thanks to a considerable effort from the director and all team leaders who participate in the new project 2015-2020.

Recommendations

A lot of effort has been successfully invested in the new structure and should be pursued actively. The teams working at the GIN should be encouraged to take advantage of the multidisciplinarity and the efficient opportunities provided by their environment, and to benefit from the impetus associated with the change in leadership and restructuring. A proper focus on their many strengths, such as the cellular and molecular biology of the neuronal cytoskeleton, vesicle trafficking in neurons, dynamic imaging from the cell to the organism, with views on the pathophysiology of diseases such as epilepsy, myopathies, neurodegenerative and Huntington disease and on translational research leading to novel therapeutic vistas, is advised to avoid dispersion of energy and means. Given the large workforce, it should be possible to combine in a balanced manner research projects along classical lines and some other projects with more original but also more risky aspects. Focusing on highly competitive and original themes should allow GIN researchers to publish their work in high visibility journals and translate their research in patents and applications.