

Research evaluation

FINAL RESUME ON THE RESEARCH UNIT:

Lyon Neuroscience Research Center - CRNL

Under the supervision of the following institutions and research bodies:

Centre National de la Recherche Scientifique - CNRS

Institut National de la Santé et de la Recherche Médicale - Inserm

Université Claude Bernard Lyon 1 - UCBL Université Jean Monnet Saint-Étienne - UJM

EVALUATION CAMPAIGN 2019-2020GROUP A

Report published on June, 05 2020



In the name of Hcéres¹:

Nelly Dupin, Acting President In the name of the experts committee²:

Jean-René Cazalets, Chairman of the committee

Under the decree No.2014-1365 dated 14 November 2014,

¹ The president of Hcéres "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 experts committee". (Article 11, paragraph 2).



Tables in this document were filled with data submitted by the supervising body on behalf the unit.

UNIT PRESENTATION

Unit name: Lyon Neuroscience Research Center

Unit acronym: CRNL

Current label and N°: CNRS UMR 5292 - INSERM UMRS 1028

ID RNSR: 201119399T

Application type: Restructuration

Head of the unit (2019-

2020): Mr Olivier Bertrand

Project leader (2021-2025):

Mr Olivier BERTRAND

Number of teams and/or

themes:

18

EXPERTS COMMITEE MEMBERS

Chair: Mr Jean-René CAZALETS, CNRS Bordeaux

Mr Philippe LEFEVRE, Université Catholique de Louvain, Belguim

Mr Guillaume Masson, CNRS Marseille

Ms Anne-Lise PITEL, Normandie Université, Caen

Mr Vincent Prevot, Inserm Lille (representative of Inserm CSS)

Ms Marie-Catherine Rousselin-Tiveron, CNRS Marseille

Experts: Mr Jean-Christophe Sandoz, CNRS Gif-sur-Yvette (representative of CoNRS)

Mr Omar Touzani, Cyceron Caen (representative of CNU)
Ms Jeanny TrainEau, CNRS Bordeaux (supporting personnel)

Mr Pierre Veinante, Université de Strasbourg

Mr Michael Zugaro, Centre de Recherche Interdisciplinaire en Biologie,

Collège de France

HCÉRES REPRESENTATIVE

Ms Sandrine BERTRAND

REPRESENTATIVES OF SUPERVISING BODIES

Mr Etienne HIRSCH, INSERM

Mr Jean-François MORNEX, Université Lyon 1

Mr Bernard Poulain, CNRS

Mr Stéphane Riou, Université de Saint-Etienne



INTRODUCTION

HISTORY AND GEOGRAPHICAL LOCATION OF THE UNIT

The Lyon Neuroscience Research Center has been created under its present contours in January 2011 under the auspices of the INSERM, CNRS, the University of Lyon 1 and the University of Saint Etienne. At the national level, it gathers one of the largest Neuroscience community within a same institute. It has been renewed in 2016 for a 5 year period (up to 2020), but until the beginning of 2019, the teams have been dispersed throughout various sites. One major final achievement of this scientific restructuration has been the resettlement on a main building (Neurocampus building) designed to accommodate the whole scientific community of the CRNL. Over these last 5 years research forces have risen by 12%.

While the range of scientific approaches at the institute level extends from the most molecular to the most integrative areas, it is important to note that research in integrative and cognitive neurosciences is of paramount importance.

Ambitious translational research programmes are based on the participation of a large number of clinicians in the project and benefit from the immediate vicinity of the various hospital centres hosting psychiatry (Le Vinatier Hospital) or neurology (Pierre Wertheimer Hospital) services. Noteworthy, this contribution of clinical research personnel that includes university/hospitals staff irrigates all the constituent teams. The current project of the institute brings out new teams, the number of which increases from 14 to 18. CRNL researchers benefit from access to high-level technology platforms hosted directly in the institute and for which they are the prime contractor or located nearby (CERMEP, etc.)

The CRNL is encompassed by a highly stimulating clinical and scientific surrounding since the majority of the teams are part of highly competitive national programs (IHU CESAME coordinated by CRNL; LabEx CORTEX, CELYA, PRIMES...).

Management team

The CRNL is directed by Olivier Bertrand since 2011. The Deputy-Director position previously occupied by Dr. Rémi Gervais and which was vacant since 2017 is now held by Dr Laurent Bezin.

HCÉRES NOMENCLATURE

SVE4; SVE5-3; SHS4-2

THEMATICS

Thanks to its unusual large size, the CRNL has developed multilevel approaches for understanding brain functions, largely from an integrated perspective. Despite the diversity of teams contributing to the project, researches are rather focused on some brain functions that are as follows: perception, action, attention, memory, emotion, social cognition, sleep, state of consciousness. As a result of the history of the teams involved in the project, CRNL is one of the rare laboratories in which all the sensory modalities are scrutinized. In most cases, these specific lines of research are approached at the fundamental level but also with an extremely strong translational valence due to its close connections with the exceptional hospital surrounding environment and the large number of clinicians that participate to most team projects. These translational approaches aim at unravelling the pathophysiological basis of mental or neurological disorders, identifying biomarkers that may be used to predict the late emergence of neurological/mental disorders and developing preventive and therapeutic strategies based on drug therapies but also, and this represents a major issues in numerous teams (12 out of 18), therapies based on rehabilitation and intervention research.



UNIT WORKFORCE

Lyon Neuroscience Research Center		
Active staff	Number 06/30/2019	Number 01/01/2021
Full professors and similar positions	29	21
Assistant professors and similar positions	28	23
Full time research directors (Directeurs de recherche) and similar positions	21	15
Full time research associates (Chargés de recherche) and similar positions	39	30
Other scientists ("Conservateurs, cadres scientifiques des EPIC, fondations, industries, etc.")	0	0
High school teachers	0	0
Supporting personnel (ITAs, BIATSSs and others, notably of EPICs)	108	94,91
Permanent staff	225	184
Non-permanent professors and associate professors, including emeritus	12	
Non-permanent full time scientists, including emeritus, post-docs (except PhD students)	43	
PhD Students	87	
Non-permanent supporting personnel	36	
Non-permanent staff	178	
Total	403	183,91

GLOBAL ASSESSMENT OF THE UNIT

The CRNL is a laboratory beyond normal standards both by its size and its unique positioning in the field of Neuroscience. Dedicated to integrative and cognitive neuroscience, it includes more than 400 people. One remarkable feature of the CRNL is its massive implication in true translational or societal research programs which are underpinned by strong programs of fundamental researches that are the basis for ambitious translational programs. These translational programs are favoured first by the strong involvement of the clinicians that take part to the project and by an exceptional clinical and scientific environment within walking distance.

Several teams include people located in Saint-Etienne and in Lyon and the resulting association has allowed to create some of the most original and dynamics research groups.

Although, it has been actually created on January 2011, the next 5 year project (2021-2025) will represent for the CRNL a major step forward since it is only recently (January 2019) that it has been configured in the present form with a unity of place for all people involved in the project. There is no doubt that the day-to-day interactions of all actors will participate to boost all activities of the center. As of now, the CRNL has been proved to be extremely appealing with more than 30 new permanent researchers who have joined the Centre since 2014. For all personals, there has been a testimony that the Centre, by providing scientific interactions and exceptional access to cutting-edge platforms, presents an added-value for their research development.



Researchers from the CRNL have been extremely successful in obtaining European (> 30 grants from European union including ERC, ERAnet Neuron, Marie Curie grants... mostly as coordinators) and national (almost 100 ANR programs as coordinators) competitive funding as well as important funding from charities and foundations (>100). They also coordinated 7 PIA programs and were participants to 10 additional ones.

The CRNL represents a strategic issue and is central for training since it accommodates the majority of teachers/researchers in charge of organizing neuroscience training programs for LYON 1 University students who thus benefit from this exceptional environment.

It should be underlined that the successful achievements of the Centre is, for a large part, based on the impressive background work performed by its Director who has known how to get everyone to adhere to the project.

Based on its scientific outputs and activities, its central positioning in training, the close entanglement between fundamental and clinical science, the CRNL is as of now an outstanding laboratory and, as it is only functional since several month the best is yet to come. Overall, structuring and scientific strategy actions that are undertaken, will allow to address at a short/medium term, major issues of public health.

The evaluation reports of Hceres are available online: www.hceres.com

Evaluation of clusters of higher education and research institutions Evaluation of higher education and research institutions **Evaluation of research Evaluation of doctoral schools Evaluation of programmes** International evaluation and accreditation



2 rue Albert Einstein 75013 Paris, France T. 33 (0)1 55 55 60 10

