

FINAL RESUME ON THE RESEARCH UNIT: Brain Tech Laboratory (BrainTech Lab)

UNDER THE SUPERVISION OF THE FOLLOWING INSTITUTIONS AND RESEARCH BODIES:

Université Grenoble Alpes - UGA

Institut national de la santé et de la recherche
médicale – Inserm

EVALUATION CAMPAIGN 2019-2020 GROUP A



In the name of Hcéres¹:

Nelly Dupin, Acting
President

In the name of the experts committee²:

Michel De Mathelin, 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:	Brain Tech Laboratory
Unit acronym:	BrainTech Lab
Current label and N°:	U 1205
ID RNSR:	201622481W
Application type:	Renewal
Head of the unit (2019-2020):	Mr François BERGER
Project leader (2021-2025):	Mr François BERGER
Number of teams and/or themes:	1

EXPERTS COMMITTEE MEMBERS

Chair:	Mr Michel DE MATHELIN, Université de Strasbourg
Experts:	Mr Jean-François AUBRY, Physics for Medicine Paris (representative of Inserm CSS)
	Mr Nils DANIELSEN, Lund University, Sweden
	Mr Tristan MONTIER, Université de Bretagne Occidentale (representative of CNU)

HCÉRES REPRESENTATIVE

Mr Jean-Edouard GAIRIN

REPRESENTATIVES OF SUPERVISING INSTITUTIONS AND BODIES

Mr Hervé COURTOIS, Université Grenoble Alpes

Ms Marie-Josephe Leroy-Zamia, Inserm

Mr Hervé PELLOUX, Université Grenoble Alpes

INTRODUCTION

HISTORY AND GEOGRAPHICAL LOCATION OF THE UNIT

Until 2015, BrainTech Lab researchers were part of Clinatech, a joint program between CEA-Leti, Université Grenoble Alpes (UGA), Grenoble University Hospital and Inserm, located at the CEA Minatec Campus. The goal was to locate a translational technology research unit focusing on neurotechnology inside the CEA Leti campus, under the scientific patronage of retired Professor Alim Benabid with as main project the development of Brain Computer Interface for exoskeleton control. After an initial promising start, unfortunately, this endeavor was interrupted due to a major conflict end of the year 2015 between Inserm and CEA on the conduct of first on human trials and the Hcéres evaluation of the structure. The managing director of Clinatec at the time, François Berger, now the head of BrainTech Lab, used his conscience clause to resign from his position at Clinatec. He was firstly relocated with his team, i.e., the researchers that are now part of BrainTech Lab, in prefab modules outside the Clinatec facilities. This event had a negative impact on the conduct of different research projects. Then, in a second time, BrainTech Lab, a joint unit between Inserm and UGA, moved to two different locations in the Saint-Martin d'Hères UGA campus and inside the nearby Medical University in the Jean Roget building.

The clinical activity is now located inside Palcros department of neurosurgery under Professor Emmanuel Gay supervision at the Grenoble University Hospital. The Unit coordinates the Molecular neurosurgery biobank. The animal studies are conducted at different Grenoble animal facilities: Bio B et Jean Roget (small animals), GIN (non-human primates), Lyon veterinary school (porcine models). The research unit remains connected to CEA Leti for prototyping micro-nano medical technologies.

MANAGEMENT TEAM

BrainTech Lab is managed by François Berger, the unit head.

HCÉRES NOMENCLATURE

SVE2_3 Biologie cellulaire, biologie du développement animal

SVE5_3 Génétique médicale, pharmacologie, technologie médicale

THEMATICS

A new organization is proposed for the coming quinquennial period based on one team with three different research themes: the first theme is about "Brain Microstructure Imaging", the second theme focusses on "Theranostic micro-nano-implants", and the third theme on "Neurotechnologies for next generation medicine".

UNIT WORKFORCE

BrainTech Lab		
Active staff	Number 06/30/2019	Number 01/01/2021
Full professors and similar positions	3	3
Assistant professors and similar positions	1	1
Full time research directors (Directeurs de recherche) and similar positions	1	0
Full time research associates (Chargés de recherche) and similar positions	3	3
Other scientists ("Conservateurs, cadres scientifiques des EPIC, fondations, industries, etc.")	1	1
High school teachers		

Supporting personnel (ITAs, BIATSSs and others, notably of EPICs)	2	1
Permanent staff	11	9
Non-permanent professors and associate professors, including emeritus		
Non-permanent full time scientists, including emeritus, post-docs (except PhD students)	2	
PhD Students	5	
Non-permanent supporting personnel	3	
Non-permanent staff	10	
Total	21	9

GLOBAL ASSESSMENT OF THE UNIT

The overall scientific production of Brain Tech Lab is excellent given its size. The unit is excellent in attracting young researchers. The unit has an excellent track record for getting competitive European and national grants given its size. The performance of the unit with respect to interactions with the non-scientific world can be judged as very good from a national perspective, especially in the view of clinical trials. The unit is very good in training young scientists through research. The unit is very attractive for internships and PhD studies. The scientific production from the PhD students is very good. The management of the unit is very good with respect to interactions between members, between the director and its researchers. The formal organization of the unit is perfectible. The unit is lacking specific policies about sustainable development, data protection, or parity issues. The unit is also lacking formal laboratory council meetings, has no Rules of Procedures, nor a local commission for safety issues and work conditions (*CLHSCT*). The overall scientific strategy and projects are excellent in their objectives, but are over ambitious compared to the size of the unit.

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

hceres.com

[@Hceres_](https://twitter.com/Hceres_)

[Hcéres](https://www.youtube.com/Hceres)