

REPORT ON THE RESEARCH UNIT:
Chemical and Biological Technologies for
Health (UTCBS)

UNDER THE SUPERVISION OF THE
FOLLOWING INSTITUTIONS AND
RESEARCH BODIES:

Université Paris Descartes

Centre national de la recherche scientifique -
CNRS

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

ÉVALUATION CAMPAIGN 2017-2018
GROUP D



In the name of Hcéres¹:

Michel Cosnard, President

In the name of the experts committee²:

Jean Martinez, 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).

This report is the sole result of the unit's 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 PRESENTATION

Unit name:	Chemical and Biological Technologies for Health
Unit acronym:	UTCBS
Requested label:	CNRS UMR 8258, Inserm U1022
Application type:	Renewal
Current number:	CNRS UMR 8258, Inserm U1022
Head of the unit (2017-2018):	Mr Daniel SCHERMAN
Project leader (2019-2023):	Ms Nathalie MIGNET
Number of teams or themes:	3

COMMITTEE MEMBERS

Chair:	Mr Jean MARTINEZ, université de Montpellier
Experts:	Ms Célia BONNET, CNRS (representative of CoNRS) Mr Olivier BOYRON, université de Lyon 1 Mr Stephen HART, Institute of Child Health, London, United Kingdom Mr Frédéric LAGARCE, université d'Angers Mr André PELEGRIN, Inserm Ms Khuloud AL-JAMAL, King's College, London, United Kingdom
HCERES scientific officer:	Mr Georges MASSIOT
Representatives of supervising institutions and bodies:	Mr Jean-Louis BEAUDEUX, université Paris Descartes Mr Érick DUFOURC, INC CNRS Ms Christine GUILLARD, Inserm Mr François HIRSCH, Inserm Mr Stephano MARULLO, université Paris Descartes Mr Marius RÉGLIER, INC CNRS

INTRODUCTION

HISTORY AND GEOGRAPHICAL LOCATION OF THE UNIT

The laboratory "Unités des Technologies Chimiques et Biologiques pour le Santé" (UTCBS-Laboratory Chemical and Biology Technologies for Health) was created in 2014 and recognised by four institutions, Inserm, CNRS, the Paris Descartes university, and Chimie ParisTech.

UTCBS is the continuation of the laboratory called "Chemical and Genetic Pharmacology and Bioimaging" created in 2004. UTCBS is composed of 4 teams (Team 1: SEISADE Team: "Synthèse, Electrochimie et Systèmes Analytiques pour le Diagnostic"; Team 2: VICT "Vectors for Molecular Imaging and Targeted Therapies"; Team 3: "Biotherapies by vectorization of nucleic acids"; Team 4: "Dynamique de l'Hématopoïèse: Aspects Fondamentaux et Translationnels de la modulation par les cytokines". Three teams (2,3,4) are located at the Faculty of Pharmacy of the university Paris Descartes, one team (1) is hosted by Chimie ParisTech. Due to the fact that Paris Descartes university and Chimie ParisTech do not belong to the same "Comue" (Communautés d'Universités), team 1, located at Chimie ParisTech, is not part anymore of the present contract. However, a close collaboration should be maintained with UTCBS through a convention between Paris Descartes university and PSL university for Chimie ParisTech.

MANAGEMENT TEAM

The UTCBS is headed by Mr Daniel Scherman, assisted by Mr Fethi Bedioui as vice-director. For the next contract, Ms Nathalie Mignet, is proposed as the new director.

HCERES NOMENCLATURE

ST4: chemistry.

SCIENTIFIC DOMAIN

The scientific goal of the UTCBS is to design and synthesize new diagnostics, therapeutic tools and agents focusing on innovative drug and nucleic acid delivery systems, as well as the characterization of biotherapeutics, including the identification of biomarkers and development of imaging agents. In 2014, at the beginning of the contract, a new team joined UTCBS dedicated to the investigation of the extra-erythroid role of the red blood cells erythropoietin (EPO) production.

UNIT WORKFORCE

Unit workforce	Number 30/06/2017	Number 01/01/2019
Permanent staff		
Full professors and similar positions	9	6
Assistant professors and similar positions	17	12
Full time research directors (Directeurs de recherche) and similar positions	4	3
Full time research associates (Chargés de recherche) and similar positions	4	2
Other scientists ("Conservateurs, cadres scientifiques des EPIC, fondations, industries, etc.")	1	2
High school teachers	0	0

Supporting personnel (ITAs, BIATSSs and others, notably of EPICs)	12	11
TOTAL permanent staff	47	35
Non-permanent staff		
Non-permanent professors and associate professors, including emeritus	4	
Non-permanent full time scientists, including emeritus, post-docs	1	
Non-permanent supporting personnel	2	
PhD Students	18	
TOTAL non-permanent staff	25	
TOTAL unit		
	72	

GLOBAL ASSESSMENT OF THE UNIT

The scientific strategy of UTCBS is based on the development of multi-disciplinary research, associating chemists, physico-chemists, biologists and clinical researchers. The projects of UTCBS concern the development of technologies at the interface of chemistry and biology, directed to diagnostics, imaging agents, and advanced therapies, with the objective of medical applications, and commercialisation of their research, with high national and international visibility. Two of the three teams involved in the project are already complementary, and constitute a good mix of fundamental and applied science. Through one team, the UTCBS is also involved in a program aimed at studying the side-effects associated with the clinical use of recombinant EPO, and will bring an additional expertise to UTCBS. UTCBS will surely widen the visibility and the role of the School of Pharmacy in the field of life and health sciences. During the different meetings with PIs, researchers, technical staff, and students, that were informative, the expert committee could evaluate the involvement and the dynamism of the members of the unit, and no particular problem was raised apart from the lack of permanent staff including researchers and technicians. The new director who is proposed for the next contract was unanimously appreciated by all members of the committee. The meetings with the representatives of the university, CNRS, Inserm, Faculty of Pharmacy and Chimie ParisTech showed strong support to the unit from all of them.

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