

FINAL RESUME ON THE RESEARCH UNIT:
Biomolecular Structure of the Cell (BIOC)

UNDER THE SUPERVISION OF THE
FOLLOWING INSTITUTIONS AND
RESEARCH BODIES:

École Polytechnique -X

Centre national de la recherche scientifique -
CNRS

EVALUATION CAMPAIGN 2018-2019
GROUP E

Report published on February, 28 2019

High Council for evaluation of research and higher education



In the name of Hcéres¹:

Michel Cosnard, President

In the name of the experts committee²:

Patrick Schultz, 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 provided by laboratories and supervising bodies in the unit's application and in the Excel files "Données du contrat en cours" and "Données du prochain contrat".

UNIT PRESENTATION

Unit name:	Biomolecular Structure of the Cell
Unit acronym:	BIOC
Requested label:	UMR
Application type:	Renewal
Current number:	UMR 7654
Head of the unit (2015-2019):	Mr Yves MECHULAM
Project leader (2020-2024):	Mr Thomas SIMONSON
Number of teams:	4

EXPERTS COMMITTEE MEMBERS

Chair:	Mr Patrick SCHULTZ, IGBMC, Illkirch
Experts:	Mr Pete CULLEN, University of Bristol, United Kingdom
	Mr Richard LAVERY, CNRS, Lyon
	Ms Violette MORALES, CNRS, Toulouse (supporting personnel)
	Ms Marina RODNINA-WINTERMEYER, Max Planck Institute, Germany
	Mr Guy SCHOEHN, CNRS, Grenoble (representative of CoNRS)

HCÉRES REPRESENTATIVE

Mr Pierre COUBLE

REPRESENTATIVES OF SUPERVISING INSTITUTIONS AND BODIES

Mr Benoît DEVEAUD, Ecole Polytechnique
Mr Hugues LORTAT-JACOB, CNRS

INTRODUCTION

HISTORY AND GEOGRAPHICAL LOCATION OF THE UNIT

The Biochemistry laboratory of the Ecole Polytechnique (EP) was founded in 1975 and has been a mixed CNRS-EP research unit since then. It is located on the EP campus in Palaiseau, in the Paris-Saclay area. Following the recruitment in 2012 of a young investigator in mRNA translation and decay, the unit attracted in 2015 a young investigator to study the role of the cytoskeleton in cell morphogenesis. Previously organized as a single team with 5 research themes, the unit has diversified and is currently organized into 4 independent teams.

MANAGEMENT TEAM

Mr Yves Mechulam was the unit head for the evaluation period (2015-2019) and the new project will be headed by Mr Thomas Simonson.

HCÉRES NOMENCLATURE

SVE2

SCIENTIFIC DOMAIN

The Biochemistry laboratory of the EP was originally focussed on the study of the molecular mechanisms responsible for accurate translation of the genetic information into proteins, by using biochemical, molecular and cellular biology, analytical chemistry, physical chemistry, structural analysis and computational approaches. The research topics of the teams have diversified with the recruitment of two teams into mRNA degradation and modification and into cell biology with studies of the role of the cytoskeleton in cell morphogenesis, respectively.

UNIT WORKFORCE

	Unit workforce	
	Molecular bases and regulation of protein biosynthesis	
Active staff	Number 30/06/2018	Number 01/01/2020
Full professors and similar positions	0	0
Assistant professors and similar positions	2	2
Full time research directors (Directeurs de recherche) and similar positions	6	5
Full time research associates (Chargés de recherche) and similar positions	3	5
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)	12	12
Permanent staff	23	24
Non-permanent professors and associate professors, including emeritus		

Non-permanent full time scientists, including emeritus, post-docs	14	
<i>PhD Students</i>	5	
Non-permanent supporting personnel	4	
Non-permanent staff	18	
Total	41	

GLOBAL ASSESSMENT OF THE UNIT

The Biomolecular Structure of the Cell (BIOC) laboratory is an internationally recognized research unit covering molecular biology, structural biology, genetics, biocomputing and cellular biology in the scientific fields of protein biosynthesis, mRNA decay, protein design and interaction predictions, cell motility and morphogenesis. The performance of the newly recruited cell biology team is excellent thus showing its efficient integration in the scientific strategy of the unit.

Over the reviewing period the scientific output of BIOC has continued to be excellent both in terms of quality and quantity of the publication record with nearly 100 peer-reviewed articles and highly cited reviews. The unit's academic reputation and appeal is witnessed by an increased capacity to raise competitive funding and the attractiveness for international students and post-docs. The attractiveness of the unit is further improved by the excellent scientific equipment and environment, and the move to a new and functional building.

The BIOC has a very good record of putting fundamental science to practical use and of interacting with the non-academic world. The BIOC provides an excellent training environment for Master and PhD students, as well as for post-doctoral scholars.

The expert committee was impressed by the exceptional working atmosphere and the human relationships between all categories of personnel in the unit.

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