

REPORT ON THE RESEARCH UNIT:  
Genetic stability, stem cells and radiation  
(SGCSR)

UNDER THE SUPERVISION OF THE  
FOLLOWING INSTITUTIONS AND  
RESEARCH BODIES:

Université Paris Diderot

Commissariat à l'énergie atomique et aux  
énergies alternatives - CEA

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

Université Paris-Sud - UPSud

**EVALUATION CAMPAIGN 2017-2018**  
GROUP D



In the name of Hcéres<sup>1</sup>:

Michel Cosnard, President

In the name of the expert committee<sup>2</sup>:

Éric Solary, Chairman of the committee

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

<sup>1</sup> The president of Hcéres "countersigns the evaluation reports set up by the expert committees and signed by their chairman." (Article 8, paragraph 5);

<sup>2</sup> The evaluation reports "are signed by the chairman of the expert 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

<b>Unit name:</b>	Genetic stability, stem cells and radiation
<b>Unit acronym:</b>	SGCSR
<b>Requested label:</b>	
<b>Application type:</b>	Restructuration
<b>Current number:</b>	UMR 967
<b>Head of the unit (2017-2018):</b>	Mr Paul-Henri ROMÉO
<b>Project leader (2019-2023):</b>	Mr François BOUSSIN
<b>Number of teams:</b>	5

## COMMITTEE MEMBERS

<b>Chair:</b>	Mr Éric SOLARY, Institut Gustave-Roussy, Villejuif, France
<b>Co-Chair</b>	Mr Claus Storgaard SØRENSEN, University of Copenhagen, Denmark
<b>Experts:</b>	Mr Jacques GRILL, Institut Gustave-Roussy, Villejuif, France Ms Ann JORGENSEN, University Hospital Copenhagen, Denmark Ms Olaia NAVEIRAS, École polytechnique fédérale de Lausanne, Suisse Mr Jason PARSONS, University of Liverpool, United Kingdom Mr Philippe PASERO, Institut de Génétique Humaine, Montpellier, France (representative of Inserm CSS) Ms Alaa BADREDINE (supporting personnel)
<b>HCERES scientific officer:</b>	Mr Hinrich GRONEMEYER
<b>Representatives of supervising institutions and bodies:</b>	Ms Annelise BENNACEUR-GRISCELLI, Université Paris-Sud

Ms Christine CHOMIENNE, Inserm

Mr Pierre LE BER, CEA

Ms Laurence PARMENTIER, Inserm

Ms Sylvie ROUSSET, Université Paris Diderot

Mr François SIGAUX, CEA

Mr Alain ZIDER, Université Paris Diderot

Ms Agathe ZOUIOUECH, Inserm

## INTRODUCTION

### HISTORY AND GEOGRAPHICAL LOCATION OF THE UNIT

The “Genetic stability, stem cells and radiation” research unit was created in 2009 (4 teams) and renewed in 2014 (5 more teams) with the same supervisor, being located on two sites (Fontenay-aux-Roses and Évry). The new version of the unit is reorganized into 5 teams, with new director and deputy director, all the teams being now located at Fontenay-aux-Roses. The unit is part of the Paris-Saclay CEA Center. It is hosted by iRCM (“Institut de Radiobiologie Cellulaire et Moléculaire”), which is a component of the “Institut de Biologie François Jacob” at the “Commissariat à l’Énergie Atomique” (CEA).

### MANAGEMENT TEAM

The director is Mr François BOUSSIN, the deputy director is Ms Françoise PFLUMIO.

### HCERES NOMENCLATURE

SVE2-1; SVE2-3.

### SCIENTIFIC DOMAIN

DNA repair, stem cells, radiobiology, genetic instability. The scientific activity of the unit is focused on genome integrity in stem cells in a variety of normal and pathological situations, including cancer and any stress, with a more specific interest for radiation. Interestingly, research teams use a variety of prokaryotic and eukaryotic cells, from bacteria and yeast to mouse and human cells.

### UNIT WORKFORCE

Unit workforce	Number 30/06/2017	Number 01/01/2019
<b>Permanent staff</b>		
Full professors and similar positions	3	4
Assistant professors and similar positions	4	5
Full time research directors (Directeurs de recherche) and similar positions	2	2
Full time research associates (Chargés de recherche) and similar positions	2	2
Other scientists (“Conservateurs, cadres scientifiques des EPIC, fondations, industries, etc.”)	31	30
High school teachers	0	0
Supporting personnel (ITAs, BIATSSs and others, notably of EPICs)	29	28
<b>TOTAL permanent staff</b>	<b>71</b>	<b>71</b>
<b>Non-permanent staff</b>		

Non-permanent professors and associate professors, including emeritus	1	
Non-permanent full time scientists, including emeritus, post-docs	10	
Non-permanent supporting personnel	4	
PhD Students	21	
<b>TOTAL non-permanent staff</b>	<b>36</b>	
<b>TOTAL unit</b>	<b>107</b>	

## GLOBAL ASSESSMENT OF THE UNIT

The unit, made of 5 teams, has an excellent scientific production over the last years. Researchers have developed original models to work with and efficient collaborations with academic partners as well as industrial and R&D companies. Their research allowed deciphering new mechanisms in the maintenance of genome stability and the response of stem cells to diverse stresses. Their expertise has been recognized internationally through publications as first or last author in high-ranked journals. Training of Master and PhD students through research is efficient. The organisation and management of the unit have been excellent. It includes a majority of woman scientists and students and women promotion to the highest positions is planned to be further enforced in the coming years. The proposed reorganisation through merging groups, which will enhance the unit international visibility, is excellent. The DNA repair scientific programs extend from chromosome dynamics in budding yeast to base excision repair in mammal cells with applications in radiobiology, especially in the brain. The stem cell programs are dedicated to germ cell and hematopoietic and neural stem cell differentiation in physiological and patho-physiological settings. The direction will keep these programmes focused on the most important and productive aspects in order to continue improving the quality of scientific production and enforce the connections of the team researchers with the real life, especially in medicine, to give their exiting research a larger audience.

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