

# HCERES

High Council for the Evaluation of Research  
and Higher Education

Department of Research Evaluation

report on research unit:

Valrose Institute of Biology

iBV

under the supervision of  
the following institutions  
and research bodies:

Université de Nice Sophia Antipolis

Centre National de la Recherche Scientifique - CNRS

Institut National de la Santé Et de la Recherche

Médicale - INSERM

Evaluation Campaign 2016-2017 (Group C)

# HCERES

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*In the name of HCERES,<sup>1</sup>*

Michel Cosnard, president

*In the name of the experts committee,<sup>2</sup>*

Didier Stainier, chairman of the committee

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

<sup>1</sup> The president of HCERES "countersigns the evaluation reports set up by the experts 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)

## Evaluation report

This report is the sole result of 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 name:	Valrose Institute of Biology
Unit acronym:	iBV
Label requested:	UMR multi-organismes
Current number:	CNRS UMR 7277, INSERM U1091
Name of Director (2016-2017):	Mr Stéphane NOSELLI
Name of Project Leader (2018-2022):	Mr Stéphane NOSELLI

## Expert committee members

Chair:	Mr Didier STAINIER, Max Planck Institute for Heart and Lung Research, Bad Nauheim, Germany
Co-chair:	Ms Catherine ETCHEBEST, Université Paris Diderot (representative of the CNU)
Experts:	Mr Alonso CLAUDIO, University of Sussex, Brighton, UK
	Mr Ilan DAVIS, University of Oxford, UK
	Ms Anne FERNANDEZ, IGH, Montpellier (representative of the CoNRS)
	Mr Germain GILLET, INSERM, Lyon (representative of the CSS INSERM)
	Mr André GOFFINET, Université Catholique de Louvain, Belgium
	Ms Cathy JACKSON, Institut Jacques Monod, Paris
	Mr Philippe JUIN, Université de Nantes (representative of the CoNRS)
	Mr Marco MILAN, IRB Barcelona, Spain
	Mr Luis A PARDO, Max Planck Institute for Experimental Medicine, Germany
	Ms Françoise REDINI, Université de Nantes
	Ms Bareille REINE, INSERM, Bordeaux (representative of the supporting personnel)
	Mr Stefano DE RENZIS, EMBL Heidelberg, Germany
	Ms Eleanor SCOTT, University of Leeds, UK

Mr Daniel VAIMAN, Institut Cochin, Paris

Mr Michael WELLER, University Hospital Zurich, Switzerland

Scientific delegate representing the HCERES:

Mr Bohdan WASYLYK

Representatives of supervising institutions and bodies:

Mr Jeanick BRISWALTE, Université Nice Sophia Antipolis

Mr Jean-Maurice DURA, CNRS

Ms Aurélie PHILIPPE, INSERM

Head of Doctoral School:

Ms Marylène POIRIE, Doctoral School n°85, "Life Sciences and Health"

## 1 • Introduction

### History and geographical location of the unit

iBV originates from the “Centre de Biochimie” (CB) created in 1973 by M. LAZDUNSKI as a CNRS laboratory on Valrose Campus. It focused on pharmacology, oncogenes and cell division control. In 1989, CB split into two units with distinct administrative affiliations (CNRS and INSERM). From 1999 to 2007, new groups joined each unit, and brought new model systems (yeast, *Drosophila*) and topics (cell death, cell and developmental biology as well as mouse genetics with a focus on kidney biology). In 2008, the CNRS unit headed by Mr Stéphane NOSELLI as the Institute of Developmental Biology and Cancer (IBDC) expanded by recruiting new teams that reinforced existing models and introduced nematode and zebrafish as new models. Meanwhile, the INSERM unit headed by Ms Minoou RASSOULZADEGAN recruited new teams working on mouse genetics with a focus on metabolism, neurogenesis and reproduction. In 2012, with the aim of building an internationally recognised institute with increased visibility, the two laboratories were merged back and the “Institute de Biologie de Valrose” was created (Mr Stéphane NOSELLI). Since, iBV has pursued its growing and structuring role on the Valrose campus through surface expansion and recruitment of 10 new groups. iBV is now the largest and oldest biology laboratory in the area.

As a result of this long history and attractiveness, the institute is located in 3 buildings and on 2 campuses, 5-10 min away by car, and has a total surface area of 4 500m<sup>2</sup>.

### Management team

The director of the unit is Mr Stéphane NOSELLI and he is assisted by a deputy-director, Mr Gilles L'ALLEMAIN and a general secretary, Ms Martine ROULET.

### HCERES nomenclature

Principal	SVE2 Biologie Cellulaire, Imagerie, Biologie Moléculaire, Biochimie, Génomique, Biologie Systémique, Développement, Biologie Structurale.
Secondaire	SVE4 Neurologie.
	SVE6 Santé Publique Épidémiologie Recherche Clinique
	SVE5 Physiologie, Physiopathologie, Cardiologie, Pharmacologie, Endocrinologie, Cancer, Technologies Médicales.

### Scientific domains

iBV is an international research institute involved in basic research in developmental biology, cell biology, genetics, signalling as well as translational research on a number of pathologies (metabolic diseases, cancer, neuronal diseases, bone regeneration and growth). The focus of the Institute is to understand the basic principles governing the development and function of normal cells, tissues and embryos, and those leading to pathogenesis.

Unit workforce

Unit workforce	Number on 30/06/2016	Number on 01/01/2018
N1: Permanent professors and similar positions	25	34
N2: Permanent researchers from Institutions and similar positions	62	62
N3: Other permanent staff (technicians and administrative personnel)	51	55
N4: Other researchers (Postdoctoral students, visitors, etc.)	34	
N5: Emeritus	2	
N6: Other contractual staff (technicians and administrative personnel)	25	
N7: PhD students	48	
TOTAL N1 to N7	247	
Qualified research supervisors (HDR) or similar positions	58	

Unit record	From 01/01/2011 to 30/06/2016
PhD theses defended	50
Postdoctoral scientists having spent at least 12 months in the unit	23
Number of Research Supervisor Qualifications (HDR) obtained during the period	11

## 2 • Assessment of the unit

### Global assessment of the unit

The focus of the Institute is to understand the basic principles governing the development and function of normal cells, tissues and embryos, and those leading to pathogenesis. iBV addresses broad questions, including cell communication through major signalling pathways, cell and tissue growth, metabolism, body patterning, cell death, cell-matrix interactions, cell differentiation, stem cells, morphogenesis, cell polarity, trafficking, neurogenesis, physiology, reproduction, cancer and evolution. The main originality of iBV is the availability of a large variety of model organisms, including yeast, nematode, drosophila, sea urchin, xenopus, zebrafish, mice, and human cell lines.

The unit benefits from important technological platforms (imaging, flow cytometry and cell-sorting, biochemistry and molecular biology, histopathology, bioinformatics, a computer network and storage) and animal-house facilities.

Since 2012, the new “Institut de Biologie de Valrose” has pursued its growth by recruiting 10 new teams, which has resulted in a 26% increase of human resources. Among them, 5 are junior teams that benefit from competitive support programs e.g. Emergence, ATIPE/Avenir. These groups have reinforced various topics, including development, cancer, physiology, neurogenesis, RNA biology and model systems. They have also brought in new expertise in the biophysics of developmental processes and in human therapy, and introduced new model systems.

iBV has become a major institute in biology that has increased its national and international reputation, as evidenced by international grants (e.g. 3 ERC), invitations to international congresses, visits of foreign institutions, and international collaborations. iBV has broad expertise, is attractive for new groups, is involved in various networks (2 LABEX and an IDEX program), interacts with companies, has a very good organisation in terms of management and decision making, and has strong interactions with the university. However, the animal facilities and buildings need to be refurbished, there is a lack of technical resources on the platforms and the laboratories are too dispersed geographically.