

Research evaluation

FINAL RESUME ON THE RESEARCH UNIT: Integrative Physics and Physiology of Trees in Fluctuating Environments (PIAF)

UNDER THE SUPERVISION OF THE FOLLOWING INSTITUTIONS AND RESEARCH BODIES: Institut National de Recherche pour l'Agriculture, l'Alimentation et l'Environnement – INRAE Université Clermont-Auvergne

EVALUATION CAMPAIGN 2019-2020 GROUP A

Report published on March, 20 2020



In the name of Hcéres¹:

Nelly Dupin, acting President In the name of the experts committee²:

Marco Borghetti, 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).

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Tables in this document were filled with data submitted by the supervising body on behalf the unit.

UNIT PRESENTATION

Unit name:	Integrative Physics and Physiology of Trees in Fluctuating Environments
Unit acronym:	PIAF
Current label and N°:	UMR-A 0547
ID RNSR:	200017466P
Application type:	Renewal
Head of the unit (2019- 2020):	Mr Bruno Moulia
Project leader (2021-2025):	Mr Bruno Moulia
Number of teams and/or themes:	4

EXPERTS COMMITEE MEMBERS

Chair:	Mr Marco Borghetti, Università della Basilicata, Italy
Experts:	Mr Jean-Marc BONNEFOND, INRAE, Villenave d'Ornon (representative of support personnel)
	Mr Kaare JENSEN, Technical University of Denmark
	Mr Philippe Simier, Université de Nantes (representative of CNU)
	Mr Michel ZIVY, CNRS, Gif-sur-Yvette (representative of INRAE CSS)

HCÉRES REPRESENTATIVE

Mr Serge DELROT

REPRESENTATIVES OF SUPERVISING BODIES

Mr Laurent Augusto, INRAE

Mr Pierre Cellier, INRAE

Mr Vianney Dequiedt, UCA

Mr Philippe HINSIGER, INRAE



INTRODUCTION

HISTORY AND GEOGRAPHICAL LOCATION OF THE UNIT

The Integrative Physics and Physiology of Trees in Fluctuating Environment (PIAF) UMR is a joint unit set up between the National Institute of Agronomic Research (INRAE, Institut National de Recherche pour l'Agriculture, l'Alimentation et l'Environnement) and the University of Clermont Auvergne (UCA; formerly the Blaise Pascal University of Clermont-Ferrand) in January of 2000. The PIAF UMR is affiliated with the Environment and Agronomy and the Ecology of Forest, Meadows, and Aquatic Environments departments at INRAE and with the Life Sciences, Health, and Environment Collegium at UCA. The unit is located on two sites about five km away: INRAE site in Crouël and the UCA Campus in Cézeaux.

Management team

Director: Mr Bruno Moulia

Deputy Directors: Mr Hervé Cochard; Mr Nicolas Dones; Ms Valérie Legué.

HCÉRES NOMENCLATURE

SVE1_1 Biologie cellulaire et biologie du développement végétal

THEMATICS

The research focus of the UMR is the interaction between trees and their environments, with particular attention given to tree responses to abiotic factors. The research is conducted at different scales of biological organization, including cells, individual organisms (trees), and populations (forest stands), using physiological, biophysical and modeling approaches. The research mission encompasses three main objectives: to define genotypes and ecotypes that improve tree resistance/resilience to climate change; to provide insights into changes in the natural distribution of tree species due to climate change; and to propose management methods that ensure tree systems' durability and sustainability.

UNIT WORKFORCE

Physcis and phsyiology of trees in fluctuating environments		
Active staff	Number 06/30/2019	Number 01/01/2021
Full professors and similar positions	4	4
Assistant professors and similar positions	10	10
Full time research directors (Directeurs de recherche) and similar positions	6	6
Full time research associates (Chargés de recherche) and similar positions	7	7
Other scientists ("Conservateurs, cadres scientifiques des EPIC, fondations, industries, etc.")	0	0
High school teachers	1	1
Supporting personnel (ITAs, BIATSSs and others, notably of EPICs)	26	26
Permanent staff	54	54
Non-permanent professors and associate professors, including emeritus	0	

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	3	Non-permanent tull time scientists, including emeritus, post-docs (except PhD students)
	10	PhD Students
	6	Non-permanent supporting personnel
	19	Non-permanent staff
54	73	Total

GLOBAL ASSESSMENT OF THE UNIT

UMR PIAF is a well-recognized institution for the quality of its research and teaching: it makes a substantial contribution to the scientific progress in its field, and provides high quality academic and scientific training. The scientific production is of high level and the participation to national and international research projects is remarkable. This has ensured an adequate level of funding. Impressive interactions with the regional socio-economic environment are documented, and a very intense activity of scientific dissemination. The management has favored a well-balanced and interdisciplinary research organization, characterized by collaborative atmosphere and shared objectives.

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