

# Research evaluation



UNDER THE SUPERVISION OF THE FOLLOWING INSTITUTIONS AND RESEARCH BODIES:

Institut National de la Recherche Agronomique - INRA

# **EVALUATION CAMPAIGN 2019-2020**GROUP A

Rapport publié le 27/02/2020

High Council for evaluation of research and higher education



In the name of Hcéres<sup>1</sup>:

Nelly Dupin, Acting President

In the name of the experts committee2:

Stefaan De Smet, Chairman of the committee

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

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

<sup>&</sup>lt;sup>2</sup> The evaluation reports "are signed by the chairman of the experts committee". (Article 11, paragraph 2).



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

# **UNIT PRESENTATION**

**Unit name:** Quality of Animal Products

Unit acronym: QuaPA

Current label and N°: UR 0370

**ID RNSR**: 196217811E

**Application type:** Renewal

Head of the unit

(2019-2020): Ms Véronique Santé-Lhoutellier

Project leader

Ms Véronique Santé-Lhoutellier (2021-2025):

3

Number of teams and/or

themes:

# **EXPERTS COMMITTEE MEMBERS**

Chair: Mr Stefaan De Smet, Ghent University, Belgium

Experts: Mr Thierry BENEZECH, INRA Villeneuve d'Ascq (representative of Inra CSS)

Mr Patrick Berthault, CEA Saclay, Gif-sur-Yvette

Ms Ghislaine HILBERT, INRA Bordeaux-Aquitaine (supporting personnel)

# **HCÉRES REPRESENTATIVE**

Mr Serge Delrot

Mr Steven Ball

# REPRESENTATIVE OF SUPERVISING INSTITUTIONS AND BODIES

Ms Marie-Christine RALET, INRA - CEPIA



## INTRODUCTION

#### HISTORY AND GEOGRAPHICAL LOCATION OF THE UNIT

The unit 'Qualité des Produits Animaux' (QuaPA UR 0370) is situated in the INRA centre Auvergne-Rhône-Alpes in Saint-Genès-Champanelle in two groups of buildings 200 m apart from each other. The unit is an INRA research centre and belongs to the CEPIA department ('Caractérisation et Elaboration des Produits Issus de l'Agriculture'). Since 2010, following an evaluation of the AERES commission, the unit consists of three disciplinary teams (BPM - Biochimie et Protéines du Muscle; IT - Imagerie et Transferts; MASS - Micro-contaminants, Arômes et Sciences Séparatives) and two platforms (AgroR – AgroResonance; PFEMCp - Composante protéomique de la Plateforme d'Exploration du Métabolisme). Because of their research activities, AgroResonance was evaluated as a research team in this report. The unit's research focuses on foods, mainly meat and meat products, aiming at guaranteeing their nutritional and sanitary quality. The expertise and the experimental and analytical facilities of the unit allow to address different dimensions of the quality of foods at different scales.

The unit has been certified in February 2017 in the Project I-SITE CAP 20-25, notably in Challenge 1 on sustainable agro-ecosystems in a context of global change, as well as in the Challenge 3 on nutrition and health. The unit has contributed to the creation of the Auvergne-Rhône-Alpes Research Consortium for Ruminant Meat (CReA-VIANDE), and to the creation of the regional platform IVIA, uniting *in vivo* imaging means, and its certification IBISA in 2018. These structures strengthen the network of the unit and permit additional research funding, *e.g.*, at the CPER level. The two analytical platforms of the unit are recognized as one of the few ISCs (Collective Scientific Infrastructure), nationally. At the level of the institute, the unit participates in the strategic directions of the department, which also facilitates collaborative projects. Through involvement in various networks, the unit has also built strong relationships with several agro-industrial technical institutes. The unit is affiliated with the Doctoral School of Life Sciences, Health, Agronomy, Environment (ED SVSAE), where all its PhD students are enrolled.

#### MANAGEMENT TEAM

Head of the unit: Ms Véronique Santé-Lhoutellier Deputy Head of the unit: Mr Pierre-Sylvain Mirade.

#### **HCÉRES NOMENCLATURE**

SVE1

#### **THEMATICS**

QuaPA is the main unit in France conducting research on the quality and technology of meat and meat products at a regional, national and international scale, aiming at improving their nutritional and sanitary quality along the chain. The BPM team performs research on two topics: (i) the chemical and enzymatic reactivity of foods, mainly meat and meat products, during transformation processes from production until digestion, (ii) the valorisation of residues of the animal production chain. The IT team conducts research also on two topics: (i) the multiscale mechanistic study of the effect of transformation processes on the quality and structure of meat and meat products, (ii) the development of in silico prediction models for the effect of these processes on the quality and losses of meat products. The MASS team addresses the behaviour of chemical contaminants in meat and meat products at different levels of the chain, (i) in primary production, (ii) during processing, and (iii) during digestion.



#### **UNIT WORKFORCE**

QuaPA		
Active staff	Number 06/30/2019	Number 01/01/2021
Full professors and similar positions	0	0
Assistant professors and similar positions	0	0
Full time research directors (Directeurs de recherche) and similar positions	5	5
Full time research associates (Chargés de recherche) and similar positions	3	3
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)	29	28
Permanent staff	37	36
Non-permanent professors and associate professors, including emeritus	0	
Non-permanent full time scientists, including emeritus, post-docs (except PhD students)	0	
PhD Students	8	
Non-permanent supporting personnel	0	
Non-permanent staff	8	
Total	45	36

### GLOBAL ASSESSMENT OF THE UNIT

The research unit 'Qualité des Produits Animaux' (QuaPA) consists of three disciplinary teams and two platforms, and is the main unit in France conducting research on the quality and technology of meat and meat products. Its research is focused along 2 axes, *i.e.*, the conception of quality meat products and the sustainability of food systems in a transition context. Its expertise, human resources and research facilities allow the unit to address different dimensions of foods at different scales. The unit is certified in the Project I-SITE CAP 20-25 and is further embedded in several structures, demonstrating its strong regional and national network. The unit is affiliated with the Doctoral School of Life Sciences, Health, Agronomy, Environment

Taking into account the size of the unit, its scientific output and activities in the past period are considered excellent. Members of the unit produced a large number of peer-reviewed original scientific articles, primarily in high ranked journals within their field. Several of these articles are already frequently cited despite their recent appearance. This is complemented by a large number of review articles and other output forms, and reviewing activities on a regular basis. The unit is involved as leader or partner in a large number of national grants, yet was in the past period only involved in two European projects. The reputation of the unit at the national and international level is very good, and could be further enhanced by a larger participation in international initiatives and exchange with research groups abroad. The interactions of the unit with the non-academic world are very good with many industrial contacts, fellowships, various expertise tasks and public outreach activities. The training through research by the unit is excellent with a good number of PhD students that are very well supervised and that realize an excellent output. The organisation and life at the unit is excellent with a proper governance structure and many good research practices installed. Women are slightly underrepresented in the unit. The interaction among the teams and platforms within the unit is very good but needs permanent attention.

The proposed five-year project is considered very good and is mainly a continuation of present research lines, supported by currently available funding. In addition, research in some emerging topics will be initiated. The proposal is sound and feasible considering the expected evolution in human resources and the available facilities. The proposed research is innovative and responds well to several societal demands on meat and meat products.

The evaluation reports of Hceres are available online: www.hceres.com

Evaluation of clusters of higher education and research institutions Evaluation of higher education and research institutions **Evaluation of research Evaluation of doctoral schools Evaluation of programmes** International evaluation and accreditation





