

Research evaluation

FINAL RESUME ON THE RESEARCH UNIT: Therapeutic innovations and resistances -INTHERES

UNDER THE SUPERVISION OF THE FOLLOWING INSTITUTIONS AND RESEARCH BODIES:

École Nationale Vétérinaire de Toulouse - ENVT Institut National de la Recherche Agronomique -INRA

EVALUATION CAMPAIGN 2019-2020 GROUP A

Report published on February, 12 2020



In the name of Hcéres¹:

Nelly Dupin, Acting president

In the name of the experts committee²:

Nicholas Jonsson, 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 submitted by the supervising body on behalf the unit.

UNIT PRESENTATION

Unit name:	Therapeutic innovations and resistances
Unit acronym:	InTheRes
Current label and N°:	UMR 1436
ID RNSR:	201822822H
Application type:	Renewal
Head of the unit (2019-2020):	Mr Alain Bousquet-Melou
Project leader (2021-2025):	Mr Alain Bousquet-Melou
Number of teams and/or themes:	1

EXPERTS COMMITTEE MEMBERS

Chair:	Mr Nicholas Jonsson, University of Glasgow, United Kingdom
Experts:	Mr Mathieu EMILY, Agrocampus Ouest - Institut supérieur des sciences agronomiques, agroalimentaires, horticoles et du paysage, Rennes
	Ms Murielle Gaugain, ANSES, Fougères (supporting personnel)
	Ms Yolanda SAENZ, Centro de Investigación Biomédica de La Rioja (CIBIR), Logroño, Spain
	Mr Philippe VELGE, Inra, Centre Val de Loire, Nouzilly (representative of Inra CSS)
	Mr Paul-Louis WOERTHER, Université Paris-Est (representative of CNECA)

HCÉRES REPRESENTATIVE

Mr Jean-Paul Lalles

REPRESENTATIVES OF SUPERVISING INSTITUTIONS AND BODIES

Mr Pierre Sans, National Veterinary School, Toulouse

Ms Muriel Vayssier-Taussat, INRA



INTRODUCTION

HISTORY AND GEOGRAPHICAL LOCATION OF THE UNIT

It was decided to create InTheRes in 2014 and the decision was announced during the previous HCERES assessment of the Unit Toxalim. InTheRes was officially founded in January 2018 with staff from the E6 team (Membrane Transporters and Resistances) and the E7 team (Pharmacokinetics, Pharmacodynamics and Modelling) of the Toxalim Joint Research Unit. Since its creation in January 2018 additional staff have moved into InTheRes. InTheRes is under the responsibility of INRA and ENVT and the operation is spread over two sites: The campus of ENVT (80% of staff) and the nearby facilities of the Toxalim site (20% of staff). The ENVT campus provides a platform for analytical techniques in drug and xenobiotic quantification and a platform for animal models and animal experimentation.

MANAGEMENT TEAM

The unit is headed by Alain Bousquet-MeLOU with Anne Lespine as deputy.

HCÉRES NOMENCLATURE

SVE5 3 SVE3 1 SVE3 3

THEMATICS

The three main research themes are "Resistance to Anthelmintics and Resistance to Insecticides", "Resistance to Antibiotics" and "Individualized Therapies".

Therapeutic innovations and resistances Number Number Active staff 01/01/2021 06/30/2019 5 4 Full professors and similar positions 3 7 Assistant professors and similar positions Full time research directors (Directeurs de recherche) and similar 1 1 positions Full time research associates (Chargés de recherche) and similar 3 2 positions Other scientists ("Conservateurs, cadres scientifiques des EPIC, 0 0 fondations, industries, etc.") 0 0 High school teachers Supporting personnel (ITAs, BIATSSs and others, notably of EPICs) 14 15 Permanent staff 26 29 Non-permanent professors and associate professors, including 0 emeritus Non-permanent full time scientists, including emeritus, post-docs 3 (except PhD students)

UNIT WORKFORCE



PhD Students	5	
Non-permanent supporting personnel	2	
Non-permanent staff	10	
Total	36	29

GLOBAL ASSESSMENT OF THE UNIT

InTheRes is a Unit resulting from the fusion of two former Toxalim teams, and aiming to investigate future strategies to efficiently combat parasiticide and antimicrobial resistance. Consistent with the "One Health" perspective, the topics addressed include the development of new anthelmintic molecules, the efficacy and the impacts of various antimicrobial molecules (antibiotics, antiparasitic), their impact on emergence of resistance in animals and humans, as well as the best way to use them. The Unit's teams include diverse scientists and veterinarians, ensuring a multidisciplinary approach. Since its creation two years ago, the Unit has grown, and today it has increased its areas of expertise with the addition of complementary competences in the fields of microbiology, immunology and drug monitoring. The Unit has available a range of analytical platforms and animal models. Toxalim maintains the Axiom and EZOP platforms and these are available for use by InTheRes staff on the Toxalim site. The research group on the Toxalim site has access to the Trix transcriptomic platform of Toxalim. There are official agreements to enable access to metabolomic facilities via MetaToul, and to genomic and transcriptomic facilities via GenoToul. The multidisciplinary evolution of the Unit is clearly in line with the global approach to the drug resistance problem, which has been adopted by the Unit. Another special feature of the Unit is the capacity to conduct research that ranges from basic science to translational studies, and the implementation of innovative solutions in the field. The level of publication outputs is very good and both quantitatively and qualitatively increasing. At the same time, the growth in funded projects is strong, including both national and European funds. This funding support has allowed the Unit to optimize its operations and advance its research agenda. For all these reasons, the Unit is an important international actor in the field. The training through research in InTheRes is very good. The majority of the scientists are habilitated (HDR), the number of PhD candidates is increasing, and scientific productions from theses are satisfactory. The culture of support for the PhD candidates is very strong. Some of the members of the Unit are regularly invited to speak or chair at international conferences, and participate in expert committees. InTheRes staff interact extensively with INRA-Occitanie-Toulouse Centre and with its research units, with the University of Toulouse, and the Toulouse Mathematics Institute. Other important interactions take place with the University Hospital of Toulouse and the Cancer Institute of Toulouse. Strong collaboration with the pharmaceutical industry has resulted in several contracts, further strengthening the applied, industrial research basis of the Unit.

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



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