FINAL RESUME ON THE RESEARCH UNIT:
Research Center in Food Toxicology (TOXALIM)

UNDER THE SUPERVISION OF THE
FOLLOWING INSTITUTIONS AND
RESEARCH BODIES:
Institut National de la Recherche Agronomique - INRA
École Nationale Vétérinaire de Toulouse - ENVT
École d’ingénieurs de Purpan
Université Toulouse 3 - Paul Sabatier - UPS

EVALUATION CAMPAIGN 2019-2020
GROUP A

Report published on March, 10 2020
In the name of Hcéres¹:
Nelly Dupin, Acting President

In the name of the experts committee²:
Laurence Vian, Chairwoman 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)
UNIT PRESENTATION

Unit name: Research Center in Food Toxicology
Unit acronym: TOXALIM
Current label and N°: UMR_A_1331
ID RNSR: 201119649P
Application type: Renewal
Head of the unit (2019-2020): Ms Isabelle Oswald
Project leader (2021-2025): Ms Isabelle Oswald
Number of teams: 9

EXPERTS COMMITTEE MEMBERS

Chair: Ms Laurence Vian, Université de Montpellier (representative of CNU)
Experts: Mr Olivier Farrel, Université de Rennes 1 (representative of CSS INRA)
Ms Magali Mondin, Bordeaux Imaging Center UMS CNRS-Universite Bordeaux (supporting personnel)
Ms Doris Marko, University of Vienna, Austria
Mr Philippe Monget, INRA Centre de Tours (representative of CNECA)
Mr Martin Van Den Berg, Institute for Risk Assessment Sciences, Utrecht, Netherlands
Mr Philippe Velge, INRA Val de Loire, Centre de Tours

HCÉRES REPRESENTATIVE

Mr Jean-François Hocquette

REPRESENTATIVES OF SUPERVISING INSTITUTIONS AND BODIES

Mr Jean Dallongeville, Inra
Mr Eric Latge, École d’ingénieurs de Purpan (partenaire)
Mr Pierre Sans, École Nationale Vétérinaire de Toulouse - ENVT
Mr Alexis Valentim, Université Toulouse 3 - Paul Sabatier - UPS
Ms Muriel Vayssier, Inra

INTRODUCTION

HISTORY AND GEOGRAPHICAL LOCATION OF THE UNIT
TOXALIM is under the supervision of 4 managing bodies: French National Institute for Agricultural Research (INRA), the National Veterinary College of Toulouse (ENVT), the Engineers School of Purpan (EI-Purpan) and the University Paul Sabatier of Toulouse (UPS) In order to establish the largest research center in France in the area of toxicology of food contaminants, TOXALIM, joint research unit, UMR1331, was created in 2011 by merging five Toulouse research units, the “Pharmacology and Toxicology” INRA unit, the “Neuro-Gastroenterology and Nutrition” INRA/EI-Purpan unit, the “Xenobiotics” INRA/ENVT unit, the “Physiopathology and Experimental Toxicology” INRA/ENVT unit and a part of a team from a CNRS/UPS unit.

There were some restructuration of teams during the actual contract (2014-2019). A reorganization was carried out as one team was created in 2017 “Contaminants & Cellular stress“ (COMICS). On another hand, two teams “Pharmacokinetic, Pharmacodynamics and Modelling, PPM” and “Membrane Transporters and resistence, TMR” left the unit in 2018 to create a new research unit “InTheRes” working on resistance to antibiotics and anti-parasitic drugs. In addition, one team “Cellular and molecular toxicology of xenobiotics, TCMX” located in Sophia-Antipolis was dissolved in 2019 as his team leader retired. TOXALIM is thus composed now of 9 research teams and 3 technological platforms instead of 11 teams and 4 platforms at the beginning of the contract.

TOXALIM is located in Toulouse on 2 distincts sites, the INRA site in Saint Martin and the ENVT campus.

MANAGEMENT TEAM

The head of the unit is Ms Isabelle Oswald, the deputy-head is Vassilia Theodorou.

HCÉRES NOMENCLATURE

SVES_1

THEMATICS

TOXALIM develops research on food contaminants (e.g., pesticides, mycotoxins, neo-formed products, nanoparticles). The unit investigates their mechanism of exposure and their modes of action in relation with low doses, mixtures and long term exposure, as well as associated chronic diseases. Among them, more specifically, endocrine disruption, metabolic perturbations and cancer are focused. The scientific strategy is based on molecular and cellular assays, omics or animal models, supported in particular by three technological platforms.

UNIT WORKFORCE

<table>
<thead>
<tr>
<th>Active staff</th>
<th>Number 06/30/2019</th>
<th>Number 01/01/2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full professors and similar positions</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Assistant professors and similar positions</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Full time research directors (Directeurs de recherche) and similar positions</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Full time research associates (Chargés de recherche) and similar positions</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Other scientists (“Conservateurs, cadres scientifiques des EPIC, fondations, industries, etc.”)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>High school teachers</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Supporting personnel (ITAs, BIATSSs and others, notably of EPICs)</td>
<td>61</td>
<td>59</td>
</tr>
<tr>
<td>Permanent staff</td>
<td>102</td>
<td>101</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Non-permanent professors and associate professors, including emeritus</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Non-permanent full time scientists, including emeritus, post-docs (except PhD students)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>PhD Students</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Non-permanent supporting personnel</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Non-permanent staff</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>154</td>
<td>101</td>
</tr>
</tbody>
</table>

On 30 June 2019, among the permanent staff (102 persons), 86 belong to INRA (53 persons to Human Nutrition division, 31 to Animal Health division and 2 to Plant Health and Environment division), 7 to University Paul Sabatier, 5 to National Veterinary College of Toulouse and 4 to Engineers School of Purpan. INRA permanent staff represents 85% of the work force. Sixty-one technical personnel supported the 41 scientists of the unit.

GLOBAL ASSESSMENT OF THE UNIT

TOXALIM is an internationally recognized unit identifying and understanding adverse outcome pathways of food contaminants. The unit develops research programs coherent with human and animal health issue.

The research developed in Toxalim is considered as excellent with some outstanding contributions. Indeed, Toxalim has published scientific articles in leading journals in the field. It has attracted international, European and National funding through various projects. The unit coordinates one PIA infrastructure, MetaboHub (2013-2020) and is involved in other PIA strutures like LabEx Serenade. Members of the unit are active members of editorial boards, acting as manuscript reviewers. They are also active coordinators and participants in scientific meetings. Numerous invitations (236) as keynote speakers are reported. If the unit enjoys very good recognition at both national and international level, indicators of its international visibility could be improved.

Toxalim is also involved in more than 40 industrial contracts, patents, the creation of a start-up (Preditox) and a labcom with private partners. Toxalim members are experts in French, European and international regulation institutions.

Toxalim unit is also highly involved in training through research with the training of more than 60 PhD students and 130 master degree students over the past five-year period. Members of the unit are also involved in the coordination of mention or master’s degree courses. The unit also welcomed post-docs during the last period, almost half of them coming from abroad.

The general organization of Toxalim is very efficient and powerful. It also favors internal communication and generates a clear positioning of TOXALIM members.

The project proposed by the unit is mainly in the continuity of the passed five-year period. It is supported by investigation of translational and multidisciplinary approaches and by implementation of new models in order to provide predictive methods and tools for food contaminants hazards.
The evaluation reports of Hcères 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