FINAL RESUME ON THE RESEARCH UNIT:
Joint Research Unit Herbivores (UMRH)

UNDER THE SUPERVISION OF THE
FOLLOWING INSTITUTIONS AND
RESEARCH BODIES:
Institut National de la Recherche Agronomique - INRA
VetAgro Sup

EVALUATION CAMPAIGN 2019-2020
GROUP A

Report published on March, 09 2020
In the name of Hcéres¹:
Nelly Dupin, Acting President

In the name of the experts committee²:
Frank O’Mara, 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).
Joint Research Unit Herbivores, UMRH, INRA, VetAgroSup Lyon, Ms Isabelle CASSAR-MALEK

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

UNIT PRESENTATION

Unit name: Joint Research Unit Herbivores
Unit acronym: UMRH
Current label and N°: UMR 1213
ID RNSR: 199917863A
Application type: Renewal
Head of the Unit (2019-2020): Ms Isabelle CASSAR-MALEK
Project leader (2021-2025): Ms Isabelle CASSAR-MALEK
Number of teams and/or themes: 5

EXPERTS COMMITTEE MEMBERS

Chair: Mr Frank O’MARA, Teagasc, Carlow, Ireland
Experts: Mr Gillian BUTLER, Newcastle University, UK
Ms Ghislaine HILBERT, INRA Bordeaux-Aquitaine (representative of supporting personnel)
Ms Florence JACQUET, INRA - Campus Supagro Montpellier
Ms Odile PETIT, CNRS, Strasbourg
Mr Raimon RIPOLL BOSCH, Wageningen University and Research, Netherlands
Ms Sophie TESSERAUD, INRA Tours (representative of Inra CSS)

HCÉRES REPRESENTATIVE

Mr Serge DELROT
Mr Steven BALL

REPRESENTATIVES OF SUPERVISING INSTITUTIONS AND BODIES

Mr Pierre DUPRAZ, INRA (SAE2)
Ms Françoise MEDALE, INRA (PHASE)
Mr Yves MICHELIN, VetAgro Sup
INTRODUCTION

HISTORY AND GEOGRAPHICAL LOCATION OF THE UNIT

The UMR Herbivores (UMRH) was created in 2012 by merging the former Research Unit on Herbivores (URH) from the French National Institute for Agricultural Research (INRA) and the Livestock and Ruminant Production research group from the Institute of Higher Education and Research in food, animal health, agricultural sciences and the environment (VetAgro Sup). UMR Herbivores is thus linked to two supervising institutions: INRA and VetAgro Sup.

The unit is based in three locations: most of the staff are located at the INRA Auvergne Rhône-Alpes (ARA) Research Centre (Saint-Genès-Champanelle, about 15 km from Clermont-Ferrand); The 11 VetAgro Sup staff are based at the VetAgro Sup Campus for agronomy (Lempdes, next to Clermont-Ferrand) and for veterinary medicine (Marcy-l’Etoile, 169 km from Saint-Genès-Champanelle). Three persons are based in Bordeaux and Dijon. All of them have a dedicated office when they work at the INRA site.

MANAGEMENT TEAM

Head of unit: I. Casser-Malek
Deputy Head (Scientific Strategy): B. Graulet
Deputy Head (Operational matters): Y. Faulconnier
Associate Head (in charge of relationships with VetAgro Sup): V. Monteils.

HCÉRES NOMENCLATURE

SVE1

THEMATICS

Since 2015, the UMRH has focused more specifically on five domains, addressed at animal level or farm level.

- Adaptive capacities and robustness of animals, with studies on trade-offs between functions. These consist of resistance to diseases and stress, and integrated management of health and welfare.
- Feed efficiency of animals and farms, with studies on digestive and metabolic processes, multicriterion evaluation of feed values – especially non-competitive feed resources –, and management of the forage system;
- The construction and prediction of sensorial and nutritional qualities of meat, milk, and cheese, with studies on biomarkers and practices;
- The valuation of complementarities to increase farm systems’ sustainability and resilience, with studies on synergies between system components be they animals, feeds, or productions (mixed farming systems);
- Ecosystem services and disservices provided by farming systems, including economics and regulating services (impacts on biodiversity, pollination...) vs. emission of wastes (methane (CH4), nitrogen (N)), with studies on underlying functions and impact of practices.
UNIT WORKFORCE

<table>
<thead>
<tr>
<th>UMRH</th>
<th>Active staff</th>
<th>Number 06/30/2019</th>
<th>Number 01/01/2021</th>
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<tr>
<td></td>
<td>Full professors and similar positions</td>
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<tr>
<td></td>
<td>Assistant professors and similar positions</td>
<td>4</td>
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<tr>
<td></td>
<td>Full time research directors (Directeurs de recherche) and similar positions</td>
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<td></td>
<td>Full time research associates (Chargés de recherche) and similar positions</td>
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<tr>
<td></td>
<td>Other scientists (“Conservateurs, cadres scientifiques des EPIC, fondations, industries, etc.”)</td>
<td>0</td>
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</tr>
<tr>
<td></td>
<td>High school teachers</td>
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<td>0</td>
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<td></td>
<td>Supporting personnel (ITAs, BIATSSs and others, notably of EPICs)</td>
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<tr>
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<td>Permanent staff</td>
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<tr>
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<td>Non-permanent professors and associate professors, including emeritus</td>
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<tr>
<td></td>
<td>Non-permanent full time scientists, including emeritus, post-docs (except PhD students)</td>
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<tr>
<td></td>
<td>PhD Students</td>
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<tr>
<td></td>
<td>Non-permanent supporting personnel</td>
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<tr>
<td></td>
<td>Non-permanent staff</td>
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<tr>
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<td>Total</td>
<td>157</td>
<td>110</td>
</tr>
</tbody>
</table>

GLOBAL ASSESSMENT OF THE UNIT

The UMRH researches herbivore livestock systems, especially relating to forage utilisation. It consists of 5 multidisciplinary research teams focusing on collaborative research ranging from molecules and cells through whole animals to farming systems, both within the unit and with external national and international partners.

The main topics are (i) adaptive capacities and robustness of animals, (ii) resistance to diseases and stress, (iii) the construction and prediction of sensorial and nutritional qualities of meat, milk and cheese, (iv) the valuation of complementarities to increase farm sustainability and resilience, and (v) ecosystem services and challenges provided by farming systems. The scientific output and academic reputation of the unit is excellent, though it could be consolidated more ambitiously at an international level by securing and leading grants and enhancing its international reputation. The interactions of the unit with the non-academic world is very good overall with some excellent aspects including outreach activities although technology transfer through patenting and licensing was poorer.

The unit is very active in training and education through research and this too was considered very good to excellent. In terms of unit organisation and life, the general management of human resources and scientific policy was also found to be excellent. Areas for improvement include the implementation of scientific data management procedures and increasing communication at the unit level, especially with technical staff. The five-year project and strategy is built around evolving current strategy rather than a revolution. This is a very good approach as the issues raised in a previous report from 2015 around the role of livestock in the food system are still highly relevant, possibly even more important in 2019. However, it is not clear what external consultation has taken place to increase the unit’s impact as desired by its funding bodies.
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Evaluation of higher education and research institutions
Evaluation of research
Evaluation of doctoral schools
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