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WOAH Collaborative Centre Reports Activities 2024

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CENTRE INFORMATION

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TOR 1 AND 2: SERVICES PROVIDED

1. Activities as a centre of research, expertise, standardisation and dissemination of techniques within the remit of the mandate given by WOAHC

Category	Title of activity	Scope
		The general objective of the project among

<p>Training, capacity building (true)</p>	<p>CONTRAT DE JUMELAGE n° ENI/2022/433-530 Renforcement du dispositif national d'encadrement vétérinaire de la santé animale – TN 18 ENI AG 01 21 (2022-2025)</p>	<p>IZSAM (Italy) and the Ministry of Agriculture of France and Tunisia is to promote human health in line with the "one health" approach, animal health and welfare and primary animal production and trade at European and international level. The specific objective is to strengthen the Tunisian national health system in order to improve the control of animal health risks and to promote trade.</p>
<p>Training, capacity building (true)</p>	<p>MediLabSecure3. Preventing biological risks increased by environmental and climate change in the Mediterranean, Black Sea and Sahel regions by strengthening a structured, inclusive and institutionalized One Health approach (2022-2024)</p>	<p>The MediLabSecure project, funded by EU through the CBRN excellence initiative, aims to strengthen a network of laboratories and health institutions to prevent vector-borne diseases in 22 countries around the Mediterranean, Balkans, Black Sea, Maghreb and Sahel regions. Enhancing preparedness and response capacities to vector-borne diseases by promoting a One Health approach is the core of MediLabSecure project.</p>
<p>Training, capacity building (true)</p>	<p>Best Practices for the Welfare of Dairy Calves and Cows – CARE4DAIRY</p>	<p>CARE4DAIRY aims to identify and disseminate best practices to increase the welfare of dairy calves, heifers and cows and end-of-career animals. The project adopts a farmer-centred approach with strong involvement of other stakeholders (e.g. as member of the Advisory Board and Reviewing Committee). The consortium consists of five partners from an animal welfare science background, who are involved in EURCAW-Ruminants and Equines, and two partners specialised in applied research and bridging sciences with practices on animal welfare. The expertise of the Project Team will be complemented with external Subject Matter Experts where necessary. 260 outputs have been produced: 147 factsheets, 28 best practice guides, 28 infographics, 28 videos, 28 podcast and a newsletter. These outputs are available in English, French, German, Greek, Italian, Polish and Spanish.</p>
		<p>The general objective of this Project is to develop a web-based self-assessment and monitoring methodology to assist</p>

<p>Training, capacity building (true)</p>	<p>Development of a self-assessment and monitoring platform on the WOA standards: SAM TOOL 2.0 project (2022-2025)</p>	<p>countries in making progress on the agreed vision of full compliance with the WOA standards on stray dog population control in Europe. The SAM 2.0 platform represents a permanent and evolving IT data management tool at low risk of obsolescence, with a low-cost localisation of the questionnaire and the reports (including right to left languages). Being easily scalable to other WOA standards with minor efforts and investments, it can be considered a cornerstone of a topic-based observatory.</p>
<p>Training, capacity building (true)</p>	<p>European Reference Centre for the welfare of ruminants and equines (EURCAW Ruminants & Equines)</p>	<p>In May 2021, the Commission designated a third EU Reference Centre for animal welfare focusing on the welfare of ruminants and equines (Commission Implementing Decision (EU) 2021/755). The tasks of this centre include supporting the Commission and the Member States in the application of animal welfare requirements for ruminants and equines, carrying out scientific and technical studies, as well as conducting training courses and disseminating research findings and information on technical innovations. The centre is constituted of a consortium led by the Swedish University of Agricultural Sciences and the Swedish Centre for Animal Welfare (Sweden), and also composed of the University of Natural Resources and Life Sciences (Austria), the Ellinikos Georgikos Organismos-Dimitra/Veterinary Research Institute (Greece), the National Institute for Agriculture, Food, and Environment (France), the University College Dublin (Ireland) and the Istituto Zooprofilattico Sperimentale dell’Abruzzo e del Molise “G. Caporale” (Italy). IZSAM is participating in all the activities of the Centre and is leading the training activities.</p>
		<p>One Health One Earth is the watchword of our time marked by the pandemic and threats to the ecosystem. Putting this slogan at the centre of the public scene, the international One Health Award (OHA) honours One Health One Earth as the</p>

<p>Training, capacity building (true)</p>	<p>One Health Award</p>	<p>revolution necessary to face new challenges. For a long time, it was thought that the safety of humanity was in protecting themselves from nature; then that it was in distancing oneself from nature. The recent awareness is that our health safety is with nature, indeed it consists of the safety of nature itself. This year the appointment with the One Health Award was for the days from 11 to 13 October 2024. During those days in the city of Teramo all together scholars, opinion makers, representatives of institutions, and protagonists of culture and entertainment brought to the centre of attention, the urgent need for a change of mentality and perspective.</p>
<p>Training, capacity building (true)</p>	<p>Enhancing Research For Africa Network (ERFAN), AW sub group for the SADC region (2019-2024)</p>	<p>To establish a network of animal welfare experts in the SADC area, directly connected to local governments and research institutions, in order to develop common research activities and draft a shared strategy, aiming at ensuring a more effective implementation of the WOAAH standards on animal welfare in these countries. To consolidate the significant results achieved thus far and to take further strategic steps forward, ERFAN partners decided to promote a second three-year activity cycle (ERFAN II). The new project has been submitted to the WOAAH and is under evaluation.</p>
<p>Training, capacity building (true)</p>	<p>Guidelines for the development of the WOAAH Learning Need Analysis</p>	<p>The LNA guidelines will describe an innovative approach for: - analysing the general context from available sources of information at WOAAH level (e.g. PVS reports etc...) and set the scenario - assessing periodically, at regional or global level, knowledge gaps in relation to the sixteen Competence Packages on the basis of which the WOAAH Training Platform is organised - profiling the audiences with the aim to design tailor-made courses adopting the most effective training methodologies - planning follow-up initiatives to monitor the impact of the WOAAH training projects and design complementary interventions for the best achievements of the</p>

		investments on training - disseminating the analysis outcomes to the WOAHA Members to let them planning complementary country training strategies.
Training, capacity building (true)	Training in Food Law through an innovative methodology using new information and communication technology tools (TRIFLIM) 2022-2024	The two-year project, funded by the Servicio Español para la Internacionalización de la Educación (SEPIE) in the framework of the Erasmus+ Programme Key Action 2: Cooperation among organisations and institutions, developed an innovative e-learning programme on Quality Systems for food microbiological laboratories, providing knowledge acquisition and specialisation in the analytical area of food microbiology
Training, capacity building (true)	Food Law At Vocational Education And Training (FLAVEAT) (2023-2026)	The three-year project, funded by the European Education and Culture Executive Agency (EACEA) in the framework of the Erasmus+ Programme, aims to offer a complete vocational education training programme on food legislation to professionals employed in the food sector in various roles and functions.
Training, capacity building (true)	EU Twinning Project "Appui au renforcement du dispositif de surveillance et de contrôle de la qualité et conformité sanitaire et phytosanitaire des produits agricoles et agroalimentaires à Madagascar" - MG 19 FED AG 01 21 (2022-2025)	The project aims to secure and increase trade in agricultural and agri-food products between Madagascar and the islands of the Western Indian Ocean Region, as well with the EU and to improve the performance of agricultural sector in Madagascar in terms of quality and sanitary and phytosanitary compliance of agricultural and livestock products.
Training, capacity building (true)	Provision of support to EFSA and to ECDC in the production of the EU One Health Zoonoses report and in related zoonoses online interactive data visualisation dashboards and zoonoses story maps (OC/EFSA/BIOCONTAM/2020/03) (2021-2025)	The service aims to prepare the EU One Health Zoonoses report for the years 2020-2023 and to produce several interactive online zoonoses data visualisation dashboards and zoonoses story maps to innovate and enhance the communication of this report in order to address properly the needs of the risk managers as the volume and quality of submitted data increase every year, and the EU One Health Zoonoses reports need to be produced and published with limited resources within short deadlines (11 months).
		The 'MEDNET 4OH' project, MEDiterranean

<p>Training, capacity building (true)</p>	<p>MEDiterranean NETwork for One Health (MEDNET 4OH) (2024-2027)</p>	<p>NETwork for One Health, is a multidisciplinary initiative funded by the Italian Agency for Development Cooperation (AICS) aimed at improving the capacity to monitor and control the spread of emerging, re-emerging and endemic infectious diseases in Tunisia using the 'One Health' approach.</p>
<p>Training, capacity building (true)</p>	<p>Canine Brucellosis: diagnostic tools and management models for Brucella canis control (BruDog) Brucellosi canina: sviluppo di strumenti diagnostici e modelli gestionali per il controllo di B. canis (BruDog) (2021-2024)</p>	<p>The project aims to bridge some diagnostic and epidemiological gaps on B. canis and provide operational and decision-making tools according to a 'One Health' approach, which are indispensable for a correct management of infected animals and kennels and for preventing or diagnosing the infection in humans.</p>
<p>Training, capacity building (true)</p>	<p>EquiNotio: development of the potential of the national equine database in the field of non-DPA equines (2022-2025)</p>	<p>The project 'Equinotio', in continuity with the project 'Social Network Analysis and Innovative Diagnostic Methods for the Control of Movement and Infectious Diseases of Horses in Italy' (SNAI), intends to strengthen the protection on the health and welfare of equines not destined for Food Production (non DPA), in particular with regard to the spread of infectious diseases through the movement of international competition horses.</p>
<p>Training, capacity building (true)</p>	<p>WOAH Twinning project for Laboratory Biosafety and Biosecurity System, standardisation of laboratory performance and whole genome sequencing (WGS) by next generation sequencing (NGS) technology and bioinformatic analysis (2024-2026)</p>	<p>The main objective is to improve the knowledge and technical skills of INMV staff, in order to enable the Algerian veterinary laboratory to meet the requirements for biosafety and biosecurity, to support molecular epidemiology and phylogenetic analysis by whole genome sequencing (WGS) of emerging and re-emerging viral strains responsible for disease outbreaks and to organise and manage the proficiency tests for evaluating and harmonising the laboratory methods performance. These increased capacities will reinforce the efficacy of the surveillance of infectious disease outbreaks and facilitate the tracing of the source of infection, whether it is natural, accidental or deliberate in origin.</p>
		<p>The BLUE-MED project, funded by the</p>

<p>Training, capacity building (true)</p>	<p>Blue-Med - A novel integrated and sustainable approach to monitor and control Bluetongue spread in the Mediterranean Basin</p>	<p>PRIMA programme (Partnership for Research and Innovation in the Mediterranean Area), was launched in 2019 and presented a novel integrated and sustainable approach to monitor and control Bluetongue spread in the Mediterranean Basin. It was led by the Institute, in collaboration with international partners ANSES (France) and ENMV (Tunisia). Among the main achievements were the creation of an early warning system, essential for a timely response to outbreaks, the harmonisation of diagnostic methods among partner countries and the consequent improvement in the effectiveness of monitoring action, the identification of key factors in the spread of the virus, and the development of an innovative prototype vaccine effective against EHDV-8 (epizootic haemorrhagic disease, serotype 8), a virus closely related to Bluetongue, which represents a promising achievement towards future research paths.</p>
<p>Training, capacity building (true)</p>	<p>WOAH Twinning project on animal welfare between Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise-Italy (IZSAM) and the Ecole Nationale de Médecine Vétérinaire, Sidi Thabet, Tunisia (ENMV)</p>	<p>The WOAH Twinning project on Animal Welfare between the Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise "G. Caporale" (Parent Institute) and the École Nationale de Médecine Vétérinaire (ENMV) in Sidi Thabet (Candidate institute) provides support to the North African candidate institute to enhance capacity and improve scientific capabilities in relation to animal welfare. Over a thirty-six month period, this Twinning project is mostly focusing on the Section 7 of the WOAH Terrestrial Animal Health Code and - in particular - on the slaughter of animals, killing of animals for disease control purposes, animal transport by land, and stray dog population control. The main goal is to improve the technical knowledge and skills of the Candidate Institute staff, to support the ENMV in the process that will eventually lead to acquire the status of WOAH Collaborating Centre for Animal Welfare. After the activities carried out in 2021, 2022 and 2023 (kick off meeting, preliminary assessment visit and 5 training courses), in May 2024 a workshop</p>

		<p>to draft a proposal of new legislation on animal welfare in Tunisia was carried out. with the production of a draft of new Animal Health and Welfare Law, incorporating animal welfare principles from the chapter 7 of WOAHA TAHC. The twinning was concluded in June 2024 with a final assessment meeting and a North African meeting on animal welfare. SLU/SCAW also contributed to final assessment meeting and to the North African meeting on animal welfare. The final report has been sent to WOAHA in July 2024 and a positive evaluation has been received.</p>
<p>Training, capacity building (true)</p>	<p>Ecology of Wild-life, Livestock, huMan and Infectious Diseases in changing environments (WiLiMan-ID)</p>	<p>WiLiMan-ID addresses the complexity and the dynamics of the host-pathogen interactions for five animal infectious diseases (IDs) that are ranked as high priority by the EU (Avian influenza, African swine fever, West Nile fever, African horse sickness, and Chronic wasting disease). These IDs circulate in livestock and wildlife and, at the human-animal interfaces: two are causing severe economic losses to farming systems and three represent a threat to human health. The main objective of WiLiMan-ID is to identify key factors driving their emergence and dissemination in ever-changing environments by integrating data at different scales (pathogens>host>community of hosts>territory) and, to provide farmers, health services and policy makers with innovative strategies and methods for prevention, surveillance and control for the IDs considered in WiLiMan-ID and beyond.</p>

TOR 3: HARMONISATION OF STANDARDS

2. Proposal or development of any procedure that will facilitate harmonisation of international regulations applicable to the main focus area for which you were designated

Proposal title	Scope/Content	Applicable Area
	<p>IZSAM is member of the steering group of the</p>	

<p>WOAH Regional Platform on Animal Welfare for Europe</p>	<p>WOAH Regional Platform on Animal Welfare for Europe (https://rpawe.WOAH.int/), a platform launched by the WOAH in 2013 with the aim to improve the harmonisation in the application of animal welfare standards, mainly the ones concerning animal transport, slaughter, stray dog population management, animal welfare in disasters and welfare for working equids within the Region. Experts from the WOAH CC IZSAM contributed to implement the activities designed in the Platform action plans, providing expertise to address the established priorities including capacity building.</p>	<p>Training and Education Health Management</p>
<p>WOAH Platform for the Training of Veterinary Services</p>	<p>As WOAH CC for Veterinary Training and Capacity Building, the IZSAM is member of the WOAH Platform for the Training of Veterinary Services.</p>	<p>Laboratory Expertise Training and Education Health Management</p>
<p>ICRAD: International Coordination of Research on infectious animal diseases</p>	<p>ICRAD is a new ERA-Net Cofund Action under Horizon 2020 that will build upon the achievements of the ERA-NET EMIDA (Emerging and Major Infectious Diseases of Animals) and the ERA-NET ANIHWA (Animal Health and Welfare). This initiative aims at supporting cross-cutting research to improve public health, animal health and welfare, with associated benefits towards the environment and the economy; connecting research partners with different but complementary scientific and technological expertise. The partnership between industrial and academic researchers improves and accelerates the development of technological solutions for the benefit of animal health and welfare. Research and innovation co-funded through ICRAD would seek concerted approach towards the development of novel and improved instruments to address and control infectious diseases, particularly regarding novel detection, intervention and prevention strategies to: increase preparedness and ability to respond to emerging and endemic livestock threats; contribute to the reduction of antimicrobial and antiparasitic use in livestock and to minimising the development of resistance for the benefit of animal and public health; contribute to animal welfare by better prevention of diseases and renewed animal management and farming systems; on a larger scale, contribute to food security and competitive</p>	<p>Laboratory Expertise Health Management</p>

	and sustainable livestock systems.	
Call for tenders SANTE/2021/OP/0005 Pilot project on the welfare of dairy cattle, including measures to protect unweaned dairy calves and end-of-career animals	The Directorate-General for Health and Food Safety (DG SANTE) designated IZSAM, in consortium with universities and research centres of different European countries, and two private organisation to develop consensus-based best practice guidelines for animal welfare in the dairy sector.	Health Management
Provision of e-learning modules on emergency and disaster management	This project developed four eLearning modules on emergency and disaster management, to be included in the eLearning catalogue of the WOAHP Training Portal, under the Competency Package n. 6 "Emergency Management". The e-modules aim to provide high-level guidance on the skills required by veterinarians and will cover the preparedness and response phases of the emergency and disaster management cycle.	Health Management
Developing field epidemiology training for veterinarians – Technical guidelines and core competencies	Personnel of the WOAHP CC actively participated in the activities for the preparation of these guidelines, which were developed based on the three-tier programme model used in public health, and adapted to the needs and requirements of the animal health sector using the "One Health" approach. These guidelines provide guidance on the development of new programmes, and detailed approaches for the assessment, evaluation and accreditation of FETV programmes.	Training and Education
SAM Tool 2.0	The SAM Tool 2.0 is a peculiar methodology designed by IZSAM. It is based on the benchmarking analysis principles. It is also an IT platform that supports – through a permanent self-assessment system – WOAHP Members in policy or decision making to achieve fully compliance with the Chapter 7.7 and 8.14 of the WOAHP TAHC	Training and Education
Renforcement du dispositif national d'encadrement vétérinaire de la santé animale (2022-2025)	The specific objective of the twinning among IZSAM (Italy) and the Ministry of Agriculture of France and Tunisia is to strengthen the Tunisian national health system.	Health Management
	The goal of EcoSurv is the development of a	

<p>Establishment of a surveillance system on selected (re)emergent and at risk of introduction zoonoses based on an ecologic approach – EcoSurv</p>	<p>surveillance system based on an ecological approach, able to take into account the whole spectrum of animal species in a given ecosystem (zoocenosis) having a possible role in the maintenance, persistence and/or transmission to humans of (re)emergent pathogens, already present or at risk of introduction into the national territory. The new surveillance system to set will be integrated with the already existing ones, in order to collect and complement the information recorded into the information systems currently used by the veterinary, environmental and public health sectors in Italy. The Consortium will put in place and manage “the coordination with the actions carried out on human health surveillance” in the country. Furthermore, it will establish a coordination mechanism “to ensure the regular exchange of knowledge, threats reporting, and joint undertaking of risk assessment between animal and human health surveillance experts at Union and Member State level”. The proposed surveillance actions are conceived to produce the relevant and necessary information for the identification of proper early warning indicators and data for the risk assessment of the introduction or (re)emergence of selected zoonotic agents. These indicators, coupled with environmental and climatic data, and animal/human demographic information, will support predicting models on the possible emergence, spread and persistence of those pathogens.</p>	<p>Health Management</p>
<p>European Partnership on Animal Health and Welfare (EUPAHW)</p>	<p>The European Partnership on Animal Health and Welfare (represented by the abbreviation EUPAHW or its acronym EUPAHW) is by far the most ambitious research and innovation initiative the European Commission (EC) has funded in the framework of the Horizon Europe Programme to control infectious diseases of animals, and to promote animal welfare. Launched in 2024, the EUPAHW is anticipated to invest €360 million over seven years to boost research and facilitate cooperation between all actors. The scope goes beyond the animal health and welfare actors to enhance cross sector collaboration and, through a One Health and One Welfare approach, to provide societal impact. The objectives of the EUPAHW</p>	<p>Training and Education Health Management Animal Production Veterinary Products Wildlife Health and Biodiversity</p>



	align with the European Green Deal and its associated Farm to Fork strategy for a fair, healthy, and environmentally friendly food system.	
EURCAW Ruminants and Equines	<p>The European Union Reference Centre for Animal Welfare (EURCAW) Ruminants & Equines is the third Centre designated by the European Commission (Official Controls Regulation 2017/625, Articles 95 & 96), established in May 2021. The remit of the EURCAW is to support the Competent Authorities in EU member states with the implementation of current regulations on animal welfare. The Centre provides scientific and technical expertise on the development and application of animal welfare indicators and methods of assessment of animal welfare to competent authorities and policy workers in animal welfare. The EURCAW Ruminants & Equines covers a range of farm animal species including those used for dairy production (cows, goats, sheep, buffaloes), the production of meat by cattle, sheep, goats, deer and horses, and ruminants and equines kept for other purposes. The activities of the EURCAW Ruminants & Equines are set out in a work programme in consultation with the European Commission. As member of this EURCAW, the IZSAM contributes to the coordination of the Centre activities and to the scientific and dissemination tasks. It mainly coordinates and implements all the training initiatives foreseen by the multi-annual programmes in favour of the main target groups assigned to it: national competent authorities and their supporting bodies and official control staff in EU Member States.</p>	Health Management
European Union reference laboratory for Rift Valley fever	The European Union reference laboratory for Rift Valley fever ensures that the appropriate level of methods of analysis, test or diagnosis, and the development of validated methods and the coordinated assistance of the official laboratory is maintained.	Health Management

3. In exercising your activities, have you identified any regulatory research needs* relevant for WOA?H?

No

4. Did your Collaborating Centre maintain a network with other WOA?H Collaborating Centres (CC), Reference Laboratories (RL), or organisations designated for the same specialty, to coordinate scientific and technical studies?

Yes

Name of WOAHC/RL/other organisation(s)	Location	Region of networking Centre	Purpose
Center for Animal Health and Food Safety	USA	América	Collaboration in the framework of the WOAHC Platform for the Training of Veterinary Services and further relevant initiatives
Ecole Inter-Etats de Sciences et Médecine Vétérinaires	Senegal	África	Collaboration in the framework of the WOAHC Platform for the Training of Veterinary Services and further relevant initiatives
Ecole Nationale des Services Vétérinaires	France	Europa	Collaboration in the framework of the WOAHC Platform for the Training of Veterinary Services and further relevant initiatives
CRESVet	Argentina	América	Collaboration in the framework of the WOAHC Platform for the Training of Veterinary Services and further relevant initiatives
Veterinary Public Health and Food Safety Centre for Asia Pacific	Thailand	Asia y el Pacífico	Collaboration in the framework of the WOAHC Platform for the Training of Veterinary Services and further relevant initiatives
Panaftosa	Brazil	América	Collaboration in the framework of the WOAHC Platform for the Training of Veterinary Services and further relevant initiatives
Center for Food Security and Public Health	USA	América	Collaboration in the framework of the WOAHC Platform for the Training of Veterinary Services and further relevant initiatives

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Centre National de Veille Zoosanitaire	Tunisia	África	Collaboration in the framework of the WOAHP Platform for the Training of Veterinary Services and further relevant initiatives
Reduction of the Risk of Disasters in Animal Health (CENSA)	Cuba	América	Collaboration in the framework of the WOAHP EmVet network
Biological Threat Reduction (IIAD)	USA	América	Collaboration in the framework of the WOAHP EmVet network
UNIMI (Università degli Studi di Milano)	Italy	Europa	Collaboration in the framework of the BTSF initiative on AW and in the framework of the European Partnership on Animal Health and Welfare, WP 5 on communication, dissemination and exploitation
AINIA	Spain	Europa	Collaboration in the framework of the Erasmus+ TRIFLIM and Flaveat Project
European Reference Centre for the Welfare of ruminants and equines	Sweden, Austria, France, Greece, Ireland, Italy	Europa	The objective of the EURCAW - ruminants & equines is to provide the EU Commission and EU Member States with support to knowledge building, implementation and enforcement of relevant legislation and capacity building
Enhancing Research for Africa Network (ERFAN)	Italy/SADC	África Europa	To strengthen the network of the WOAHP FP for animal welfare from SADC countries (South Africa, Namibia, Botswana, Zimbabwe, Zambia, Mozambique,

			Lesotho, eSwatini) built in the framework of ERFAN Sub-group for Animal Welfare
Federation of European Laboratory Animal Science Associations (FELASA)	European countries	Europa	Collaboration for capacity building on Laboratory Animal Sciences – Accreditation of training courses
WOAH Animal Welfare Collaborating Centres	Global	África América Asia y el Pacífico Europa Oriente Medio	To promote the establishment of a WOAH Network of Animal Welfare Collaborating Centres
Fondazione Guido Bernardini	Italy	África América Asia y el Pacífico Europa Oriente Medio	Collaboration for capacity building on Laboratory Animal Sciences
VIRTUAL CAMPUS LDA	Portugal	Europa Oriente Medio	Collaboration in the framework of the Erasmus+ TRIFLIM and Flaveat Project
JORDAN UNIVERSITY OF SCIENCE AND TECHNOLOGY	Jordan	Europa Oriente Medio	Collaboration in the framework of the Erasmus+ Flaveat Project
NABLUS UNIVERSITY for VOCATIONAL AND TECHNICAL EDUCATION	Palestine	Europa Oriente Medio	Collaboration in the framework of the Erasmus+ Flaveat Project
PALESTINE TECHNICAL UNIVERSITY - KADOORIE (PTUK)	Palestine	Europa Oriente Medio	Collaboration in the framework of the Erasmus+ Flaveat Project
DIMIOURGIKI SKEPSI ANAPTYXIS	Greece	Europa Oriente Medio	Collaboration in the framework of the Erasmus+ TRIFLIM and Flaveat Project

AL-BALQA APPLIED UNIVERSITY	Jordan	Europa Oriente Medio	Collaboration in the framework of the Erasmus+ Flaveat Project
University of Surrey	United Kingdom	Europa	Collaboration in the framework of the European Partnership on Animal Health and Welfare, WP 5 on communication, dissemination and exploitation
University of Ghent	Belgium	Europa	Collaboration in the framework of the European Partnership on Animal Health and Welfare, WP 5 on communication, dissemination and exploitation
Germany Federal Institute for Risk Assessment (BfR)	Germany	Europa	Collaboration in the framework of the European Partnership on Animal Health and Welfare, WP 5 on communication, dissemination and exploitation
EFSA European Food Safety Authority	Italy	Europa	Collaboration in the framework of the European Partnership on Animal Health and Welfare, WP 5 on communication, dissemination and exploitation
EMA European Medicines Agency	Netherlands	Europa	Collaboration in the framework of the European Partnership on Animal Health and Welfare, WP 5 on communication, dissemination and exploitation
			Collaboration in the

APHA – The Animal and Plant Health executive agency	United Kingdom	Europa	framework of the European Partnership on Animal Health and Welfare, WP 5 on communication, dissemination and exploitation
WU – Wageningen University	Netherlands	Europa	Collaboration in the framework of the European Partnership on Animal Health and Welfare, WP 5 on communication, dissemination and exploitation
IZSLER – Istituto Zooprofilattico Sperimentale Lombardia Emilia Romagna	Italy	Europa	Collaboration in the framework of the European Partnership on Animal Health and Welfare, WP 5 on communication, dissemination and exploitation
SSI - The Animal and Plant Health	Denmark	Europa	Collaboration in the framework of the European Partnership on Animal Health and Welfare, WP 5 on communication, dissemination and exploitation
PREZODE (Preventing ZOonotic Disease Emergence)	Belgium, Burkina Faso, Cambodia, Cameroon, Chile, Democratic Republic of Congo, Congo (Brazzaville), Costa Rica, Cuba, Dominica, Dominican Republic, France, Gabon, Guinea Conakry, Haiti, Laos, Madagascar, Mexico, Morocco, Panama, Senegal, Thailand, Trinidad and Tobago, The Philippines, The United Kingdom, Uruguay, Vietnam, Zambia and Zimbabwe.	África América Asia y el Pacífico Europa	Collaboration to ensure rapid response to the risks of emerging infectious diseases of animal origin.

TOR 4 AND 5: NETWORKING AND COLLABORATION

5. Did your Collaborating Centre maintain a network with other WOAHA Collaborating Centres, Reference laboratories, or organisations in other disciplines, to coordinate scientific and technical studies?

Yes

Name of WOAHA CC/RL/other organisation(s)	Location	Region of networking Centre	Purpose
FAO/IAEA Animal Production and Health Laboratory	Austria	Europe	Hosting fellowship also focused on Animal Disease Diagnosis
ENMV (National School of Veterinary Medicine of Sidi Thabet)	Tunisia	Africa Europe	Collaboration in the framework of the twinning project "Renforcement du dispositif national d'encadrement vétérinaire de la santé animale"
Ministère de l'Agriculture, des Ressources hydrauliques et de la Pêche - Direction générale des Services vétérinaires	Tunisia	Africa Europe	Collaboration in the framework of the twinning project "Renforcement du dispositif national d'encadrement vétérinaire de la santé animale"
Ministère de l'Agriculture et de l'Alimentation	France	Africa Europe	Collaboration in the framework of the twinning project "Renforcement du dispositif national d'encadrement vétérinaire de la santé animale"
EmVetNet	Italy	Europe	The objective of the Network for Veterinary Emergencies is to support WOAHA Member Countries preparedness for and response to animal health emergencies
			Promotion of research and

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Fondazione Guido Bernardini	Italy	Europe	capacity building in Laboratory Animal Science
AISAL	Italy	Europe	Promotion of research and capacity building in Laboratory Animal Science
ETPLAS	Spain	Europe	Promotion of research and capacity building in Laboratory Animal
FOUR PAWS	Belgium/Germany	Europe	Promotion of research, capacity building, awareness raising in Animal Welfare
France Vétérinaire International (FVI)	France	Europe	Promotion of International Cooperation and relevant capacity building in Animal Health and Food Safety
The Federation of Veterinarians in Europe (FVE)	Belgium	Europe	Collaboration for competencies certification (VETCEE) and capacity building on Animal Welfare
Animal Transport Association (ATA)	USA	Americas	Collaboration for capacity building on Animal Welfare
World Road Transport Association (IRU)	Belgium	Europe	Collaboration for capacity building on Animal Welfare
Animals' Angels	Germany	Europe	Collaboration for capacity building on Animal Welfare

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RSPCA	United Kingdom	Europe	Collaboration for capacity building on Animal Welfare
Animal Welfare Foundation	United Kingdom	Europe	Collaboration for capacity building on Animal Welfare
Eurogroup for Animals	Belgium	Europe	Collaboration for capacity building on Animal Welfare
AVEC	France	Europe	Collaboration for capacity building on Animal Welfare
Copa-Cogeca	Belgium	Europe	Collaboration for capacity building on Animal Welfare
European Centre for Animal Welfare-pigs	European countries	Europe	Collaboration with EURCAW-pigs
European Centre for Animal Welfare-poultry and small farm animals	European countries	Europe	Collaboration with EURCAW-poultry and small farm animals
All the WOAHCs belonging to the WOAHC Platform for the training of Veterinary Services	France	Africa Americas Asia and Pacific Europe Middle East	Promote innovative methodologies and tools for the training of Veterinary Services globally

TOR 6: EXPERT CONSULTANTS

6. Did your Collaborating Centre place expert consultants at the disposal of WOA?H?

Yes

Name of expert	Kind of consultancy	Subject
Michele Podaliri Vulpiani, Francesco Cerasoli, Silvia D'Albenzio, Francesca Pompei, Ombretta Pediconi, Chiara Albanello, Emanuela Rossi, Annalisa Falconi, Massimo Fuina	Experts	WOAH Twinning project on animal welfare between Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise-Italy (IZSAM) and the Ecole Nationale de Médecine Vétérinaire, Sidi Thabet, Tunisia (ENMV)
Luigi Possenti, Silvia D'Albenzio, Daniela Morelli	Experts	Development of the SAM TOOL 2.0
Luigi Iannetti	Lead expert	WOAH Twinning project on animal welfare between Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise-Italy (IZSAM) and the Ecole Nationale de Médecine Vétérinaire, Sidi Thabet, Tunisia (ENMV)
Silvia D'Albenzio	Expert	WOAH Twinning project on animal welfare between Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise-Italy (IZSAM) and the Ecole Nationale de Médecine Vétérinaire, Sidi Thabet, Tunisia (ENMV): Coordination of the working group for the establishment of a permanent capacity building system in animal welfare in Tunisia
Luigi Iannetti, Michele Podaliri Vulpiani	Experts	ERFAN Sub-group for Animal Welfare for the SADC region.
Luigi Iannetti, Michele Podaliri Vulpiani	Experts	IZSAM team, team and the RTA of the EU Twinning project worked together with DGSV to achieve the objective, common to the two twinning projects. Tunis on 7-8 May 2024.
Michele Podaliri Vulpiani, Luigi Iannetti, Alessandro Ripani, Silvia D'Albenzio, Massimo Scacchia, Francesca Pompei	Experts	WOAH Twinning project on animal welfare between Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise-Italy (IZSAM) and the Ecole Nationale de Médecine Vétérinaire, Sidi Thabet, Tunisia (ENMV). North African Meeting on Animal Welfare. (Tunis, 11-12 June 2024).

Luigi Iannetti, Michele Podaliri Vulpiani	Experts	WOAH Twinning project on animal welfare between Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise-Italy (IZSAM) and the Ecole Nationale de Médecine Vétérinaire, Sidi Thabet, Tunisia (ENMV): Final assessment meeting (Tunis, 13-14 June 2024)
Francesca Pompei, Maria Luisa Danzetta	Experts	Peer Reviewing CP6 Terms of Reference- Emergency Management Competency Package (2024)
Michele Podaliri Vulpiani, Luigi Iannetti	Experts	ERFAN Online Seminar "Dog population management: the new WOAHA standard and examples of the current situation in Northern Africa, Southern Africa and Italy" 19 March 2024
Luigi Iannetti	Expert	6th WOAHA Animal Welfare Global Forum "Exploring how WOAHA Collaborating Centres can support Members to improve animal welfare". Merida, Mexico, 28-29 October 2024
Francesco Cerasoli, Luigi Iannetti	Experts	STOR/REMESA online training course on "Animal welfare during transport" in collaboration with IZSAM/SCAW WOAHA CC for AW and with WOAHA SRR of Bruxelles: part 1, 15 July 2024
Luigi Iannetti	Expert	STOR/REMESA online training course on "Animal welfare during transport" in collaboration with IZSAM/SCAW WOAHA CC for AW and with WOAHA SRR of Bruxelles: part 2, 11 October 2024
Daniela Morelli	Expert	23rd Meeting of the Steering Group of the WOAHA Platform on animal welfare for Europe, 21-23 October 2024 in Wien, Austria

TOR 7: SCIENTIFIC AND TECHNICAL TRAINING

7. Did your Collaborating Centre provide advice/services to requests from Members in your main focus area?

Yes

a) The IZSAM assisted the WOAHA Members from the Balkans in increasing preparedness capacity and contingency planning in the framework of the activities promoted by the WOAHA Platform for Animal Welfare in Europe.

b) The IZSAM developed and promoted the SAM Tool 2.0 to support the compliance of the WOAHA Members in the Europe Region to the revised Chapter 7.7 of the WOAHA TAHC and to the Chapter 8.14.

c) In the framework of the WOAHA twinning of animal welfare in Tunisia and North Africa, the IZSAM team gave support to revise the

Animal Health and Welfare Law draft proposal according to WOAHA animal welfare standards and to the establishment of the Tunisian Animal Welfare Training Centre.

8. Did your Collaborating Centre provide scientific and technical training, within the remit of the mandate given by WOAHA, to personnel from WOAHA Members?

Yes

a) Technical visit : 118

b) Seminars : 5910

c) Hands-on training courses: 1286

d) Internships (>1 month) : 5

Type of technical training provided (a, b, c or d)	Content	Country of origin of the expert(s) provided with training	No. participants from the corresponding country
B	Establishment of a surveillance system on selected (re)emergent and at-risk of introduction zoonoses based on a ecologic approach EcoSurv 31/01/2024 Online	Italy	28
A	WOAHA Twinning RRA II EDITION: Training course on Rapid risk assessment Teramo, 05-14/02/2024	Kingdom of Saudi Arabia	3
C	Information system for managing veterinary activities in non-epidemic emergencies (SIVENE) Teramo, 15/02/2024	Italy	11
B	Training in Food Law through an innovative methodology using new information and communication technology tools" (TRIFLIM) L'Aquila, 26/02/2024	Italy	59
A	Analysis of chemical contaminants in fish and fish products Teramo, 05-06/03/2024	Lebanon	2
D	Early stage researcher, University of Teramo, 18/03 – 30/04/2024	Spain	1
B	National database for companion animals Training for veterinarians	Italy	42

	from Abruzzo region 21/03/2024 On line		
B	National database for companion animals Training for veterinarians from Autonomous Province of Bolzano 6/3/2024 On line	Italy	14
B	National database for companion animals Training for veterinarians from Piemonte region 04/04/2024 (I edition) 19/09/2024 (II edition) On line	Italy	458
B	National database for companion animals Training for Carabinieri 22/04/2024 On line	Italy	78
A	IAEA Study visit Skopje, 8-19/04/2024	North Macedonia	2
C	LAS – Laboratory Animal Science Training and education in the use of animals for scientific and educational purposes Teramo, 9-10-11 / 16-17-18/04/2024	Italy	25
A	WOAH Twinning Collaborating Centre: Training on the job Rapid risk assessment Riyadh, 06-09/05/2024	Kingdom of Saudi Arabia	8
C	Inspection of food safety systems in the production of ready-to-eat products (introduction) online 13-17/05/2024 (I edition) 9-13/09/2024 (II edition)	Italy	184
A	IAEA Study visit on Whole genome sequencing (WGS) of DNA and RNA viruses and bioinformatic analyses Teramo, 6-31/05/2025	North Macedonia	2
A	Study visit on Brucellosis Teramo, 8-9/05/2025	Georgia	2

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B	EURCAW R&E, Frequency and quantity of milk feeding to dairy calves Online 15 May 2024	Belgium, Cyprus, Czechia, Estonia, Finland, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Portugal, Spain	95
B	The results of the Current Research carried out by IZSAM (Year 2023), 29/05/2024	Italy	61
A	SAFIAL - Institutional strengthening of the Ministry of Agriculture and Rural Development for the management of food safety Teramo, 30/05/2024	Albania	7
C	Inspection of food safety systems in the production of ready-to-eat products Teramo, 3-7/06/2024 (I edition) Parma, 17-21/06/2024 (II edition) Parma, 16-20/09/2024 (III edition) Teramo, 23-27/09/2024 (IV edition) Brescia, 7-11/10/2024 (V edition) Brescia, 21-25/10/2024 (VI edition) Angri, SA 2-6/12/2024 (VII edition)	Italy	168
A	WOAH twinning project on epidemiology and Risk assessment Final Meeting Riyadh, 4 – 5/06/2024	Kingdom of Saudi Arabia	22
B	The National Reference Laboratory for Listeria Monocytogenes Teramo, 12/06/2024	Italy	63
C	African Swine Fever Management in Restricted Areas Campobasso, 13-14/06/2	Italy	45
A	Jumelage européen: appui au renforcement du dispositif de surveillance et de contrôle de la qualité et conformité sanitaire et phytosanitaire des produits agricoles et agroalimentaires à Madagascar, 16-23/06/2024	Madagascar	10

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B	Organic contaminants, Teramo, 20-21/06/2024	Italy	46
A	Study visit on quality management, Parma, 24-28/06/2024	Tunisia	4
A	Technical visit of SENASA Teramo, 08-12/07/2024	Argentina	3
A	Joint meeting between the Universidade Federal de Lavras (UFLA) – Brazil and IZSAM 31/07-02/08/2024	Brazil	1
D	Training period on bovine brucellosis Teramo, March-August 2024	Brazil	3
B	Pests and diseases of small ruminants 8/8/2024 On line	Italy	585
D	Training period on virus sequencing of the disease epizootic haemorrhagic Teramo, 15/09-15/12/2025	Spain	1
C	The National Animal Nutrition Plan 2024-2026 Teramo, 19/09/2024	Italy	33
B	National database for companion animals Training for veterinarians from Umbria region 19/09/2024 On line	Italy	77
A	Training period on morphological identification of Culicoides and Culicidae Teramo, 17-26/09/2024	Slovenia	1

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A	Evaluate the IZSAM compliance with industry norms and standards, the adequacy of management system and technical competence as subcontracting laboratory Teramo, 7-9/10/2024	Namibia	2
B	One Health Award 2024. AFRICAN FRONTIERS Teramo, 11/10/2024	Italy and other countries	270
B	One Health Award 2024. FRONTIERA AFRICA (tavola rotonda ERFAN)	Italy	125
B	Seminar on Brucellosis Rome, 14-15/10/2024	Italy	166
B	European Reference Laboratory for Rift Valley Fever Montpellier/Online, 16/10/2024	Austria, Bulgaria, Croatia, Czech Republic, Denmark, France, Germany, Greece, Ireland, Italy, Lithuania, Netherland, Portugal	43
A	Study visit on nuclear and nuclear derived techniques for immunohistochemical detection of animal and zoonotic diseases Teramo, 21-25/10/2024	Serbia	1
C	Beekeeping Health Epidemiology, Laboratory Diagnosis of Bee Diseases and Honey Quality Analysis 21-22/10/2024 on line	Italy, Maroc, Tunisie, Mauritanie	33
C	Application of EC Reg. "New Hygiene Package Teramo, 23-24/10/2024	Italy	31
B	The National Reference Laboratory for Campylobacter on line 6/11/2024	Italy	201
B	The National Reference Centre for Whole Genome Sequencing of microbial pathogens: database and	Italy	55

	bioinformatic analysis Teramo, 7-8/11/2024		
C	I&R system - Identification and registration of farms, operators and animals Official controls on the I&R system under new national and EU legislation 18-19/11/2024 On line	Italy	646
B	The National Reference Centre for Veterinary Epidemiology, Programming, Information and Risk Analysis, Teramo, 19-20/11/2024	Italy	59
A	Collaborative joint meeting between Animal Plant Health Agency (APHA UK) and IZSAM Teramo, 20/11/2024	UK	7
C	Basic module for Auditors/Audit Group Managers (UNI EN ISO 19011 and UNI CEI EN ISO/IEC 17021-1 standards) Teramo, 28-29/11/2024	Italy	29
C	ISO Standards Teramo, 2-3/12/2024	Italy	30
B	Webinar on Blue Tongue online 4/12/2024	Italy	344
C	Auditor/Lead Auditor of Food Safety Management Systems (specific module) Teramo, 4-6/12/2024	Italy	29
B	LAS Laboratory Animal Science Webinar on National legislation and Ethics, Online, 9 and 12/12/2024	Italy, Switzerland and others	135
B	Ethics in animal research Teramo, 13/12/2024	Italy	19
	NON-EPIDEMIC EMERGENCIES management on Veterinary Public	Italy	22

C	Health and Food Safety Teramo, 17/12/2024		
B	EURCAW R&E, Environmental enrichment for ruminants and equines Online, 20/9/2024	European countries	107
B	EURCAW R&E, Visual and tactile contact in individually housed calves Online, 28/11/2024	European countries	87
B	Linee guida europee per il benessere animale nella filiera lattiero-casearia CONFAGRICOLTURA Roma, 26/3/2024	Italy	14
B	Road Show Care4Dairy Cuidando a nuestras vacas Madrid, 15/3/2024	Spain	24
B	The CARE4DAIRY GUIDELINES ON ANIMAL WELFARE IN THE DAIRY SECTOR Webinar May 16, 2024	European countries	149
A	Réunion technique, MEDNET 4OH Réseau Méditerranéen pour une seule santé, Tunis, 21/10/2024	Tunisia	31
B	WiliMan-ID First stakeholders roundtable, Online, 11/9/2024	European countries	37
A	2-day workshop for drafting and reviewing AW legislation in the framework of the WOAHP Twinning project on animal welfare between Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise-Italy (IZSAM) and the Ecole Nationale de Médecine Vétérinaire, Sidi Thabet, Tunisia (ENMV). Tunis on 7-8 May 2024	Tunisia	10
	North African Meeting on Animal		

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B	Welfare in the framework of the WOAHP Twinning project on animal welfare between Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise-Italy (IZSAM) and the Ecole Nationale de Médecine Vétérinaire, Sidi Thabet, Tunisia (ENMV). Tunis, 11-12 June 2024	Tunisia, Algeria, Morocco	30
B	Final meeting of the WOAHP Twinning project on animal welfare between Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise-Italy (IZSAM) and the Ecole Nationale de Médecine Vétérinaire, Sidi Thabet, Tunisia (ENMV). Tunis, 13-14 June 2024	Tunisia	25
B	ERFAN Online Seminar "Dog population management: the new WOAHP standard and examples of the current situation in Northern Africa, Southern Africa and Italy"	Algeria, Tunisia, Mozambique, Morocco, Zimbabwe, Namibia, Sudafrica, Etiopia, Libia, Sudan, Italia, Sudafrica, Egitto	82
B	Training course on «Animal welfare in poultry farms ». 16 October 2024: Follow-up meeting	Italy	30
B	20 Care4Dairy Roadshows	Austria, Germany, France, Greece, Turkey, Ireland, Poland, Sweden	2302

TOR 8: SCIENTIFIC MEETINGS

9. Did your Collaborating Centre organise or participate in the organisation of scientific meetings related to your main focus area on behalf of WOAHP?

No

TOR 9: DATA AND INFORMATION DISSEMINATION

10. Publication and dissemination of any information within the remit of the mandate given by WOAHP that may be useful to Members of WOAHP

a) Articles published in peer-reviewed journals:

1

M. Podaliri Vulpiani, F. Cerasoli, G. Giovagnoli, P. Catarci, G. Loffredo, A. Gaffuri, S. D'Albenzio, N. D'alterio. *Indagine sulla proprietà responsabile di equini in Italia [Survey on the responsible ownership of equids in Italy]. Large Animal Review 2024; 30: 215-222.*

b) International conferences:

11

F. Pompei, C. Albanello, A. Falconi, O. Pediconi, M. Piersanti, B. Alessandrini, S. D'Albenzio, *The evolution of training methodologies in a 16-year experience in the framework of the Better Training for Safer Food Programme: scalable and transferable lessons learned and best practices, INTED2024 Proceedings, Journal article, doi: 10.21125/inted.2024.2095, Part of ISSN: 2340-1079*

E. Gil, A. Herbst, J. P. Douzals, M. Calliera, E. Nilsson, C. Albanello, & S. D'Albenzio, *New E-learning course on risk mitigation measures: New technologies to improve PPP use. International Advances in Pesticide Application 2024, <https://www.aab.org.uk/product/aspects-148-international-advances-in-pesticide-application/>; January 23-25, 2024.*

A. Milano, C. Robbiati, S. Declich, P. Calistri, O. Pediconi, L. Amato, L. Paronyan, L. Avetisyan, A. Manucharyan, G. Avetisyan, T. Yesayan, A. Gevorgya, T. Markosyan, & M. G. Dente, 2024. *Assessing the adoption of one health approaches in national plans to combat health threats: The pilot of a one health conceptual framework in armenia. Tropical Medicine and Infectious Disease, 9(1), 22. doi: 10.3390/tropicalmed9010022. doi:10.3390/tropicalmed9010022*

Iannetti L. & Souilem O. (2024). *The WOAHP twinning project on Animal Welfare between IZS Teramo (Italy) and ENMV (Tunisia). Oral presentation at North African Meeting on Animal Welfare. Tunis, 11-12 June 2024.*

Iannetti L. (2024). *How an AW Collaborating Centre can support the development of national AW policies among WOAHP members. Oral presentation at the 6th WOAHP Animal Welfare Global Forum "Exploring how WOAHP Collaborating Centres can support Members to improve animal welfare" Merida, Mexico, 28-29 October 2024*

Podaliri Vulpiani M. & Iannetti L. (2024). *Overview on WOAHP animal welfare standards. Oral presentation at North African Meeting on Animal Welfare. Tunis, 11-12 June 2024.*

Iannetti L. (2024). *Guides to Good and Best practice for the welfare of heifers. Care4Dairy EU project Final Online Dissemination Meeting "The Care4Dairy guidelines on animal welfare in the dairy sector. Webinar May 16, 2024*

D'Albenzio S., Hanlon A. (2024). *Disseminating Care4dairy project outcome. Care4Dairy EU project Final Online Dissemination Meeting "The Care4Dairy guidelines on animal welfare in the dairy sector. Webinar May 16, 2024*

Veissier I., D'Albenzio S. & Falconi A. (2024) *Frequency and quantity of milk feeding to dairy calves. EURCAW Ruminants & Equines webinar, May 15, 2024*

Brunet V., D'Albenzio S. & Falconi A. (2024) *Environmental enrichment for ruminants and equines. EURCAW Ruminants & Equines webinar, September 20, 2024*

Schenkenfelder J., D'Albenzio S., Falconi A. (2024) *Visual and tactile contact in individually housed calves. EURCAW Ruminants & Equines webinar, November 28, 2024*

c) National conferences:

6

Podaliri Vulpiani M. & Iannetti L. (2024). *Care4Dairy: nuove linee guida europee per il benessere animale nella filiera di produzione del*

latte bovino. Oral presentation at the congress "La zootecnia italiana cresce: quali traiettorie nel contesto globale?". Fieragricola, 1 February 2024, Verona, Italy.

Podaliri Vulpiani M. & Iannetti L. (2024). Le linee guida europee del progetto CARE4DAIRY per il benessere animale nella filiera lattiero-casearia. Oral presentation at the conference "Linee guida europee per il benessere animale nella filiera lattiero-casearia" CONFAGRICOLTURA Palazzo Della Valle, Rome 26 March 2024

D'Albenzio S., Gli output divulgativi del Progetto Care4Dairy. Oral presentation at the conference "Linee guida europee per il benessere animale nella filiera lattiero-casearia" CONFAGRICOLTURA Palazzo Della Valle, Rome 26 March 2024

D'Albenzio S., Il progetto Care4Dairy: introduzione. Oral presentation at the conference "Linee guida europee per il benessere animale nella filiera lattiero-casearia" CONFAGRICOLTURA Palazzo Della Valle, Rome 26 March 2024

Albanello C., Follow-up meeting, Corso di formazione «Il benessere animale negli allevamenti avicoli». Online, 16 October 2024

Albanello C., La formazione: principi, metodologie e strumenti formativi, Corso di formazione «Il benessere animale degli animali in allevamento e la formazione degli allevatori ». Casalecchio di Reno (BO), 21 March 2024

d) Other (Provide website address or link to appropriate information):

5

B. Alessandrini, C. Budke, J. Cargill, D. Castellan, S. D'Albenzio, N. Dhand, et al. (2024a). Competencies for one health field epidemiology (COHFE) framework. Geneva: World Health Organization, Food and Agriculture Organization of the United Nations, and World Organisation for Animal Health.

B. Alessandrini, C. Budke, J. Cargill, D. Castellan, S. D'Albenzio, N. Dhand, et al. (2024b). Guidance for one health field epidemiology continuing education programmes: A supplemental manual to the competencies for one health field epidemiology (COHFE) framework. Geneva: World Health Organization, Food and Agriculture Organization of the United Nations, and World Organisation for Animal Health,. doi:<https://doi-org.bibliosan.idm.oclc.org/10.20506/cohfe.3434>

B. Alessandrini, C. Budke, J. Cargill, D. Castellan, S. D'Albenzio, N. Dhand, et al. (2024c). Guidance for one health field epidemiology curriculum development: A supplemental manual to the competencies for one health field epidemiology (COHFE) framework. Geneva: World Health Organization, Food and Agriculture Organization of the United Nations, and World Organisation for Animal Health.

B. Alessandrini, C. Budke, J. Cargill, D. Castellan, S. D'Albenzio, N. Dhand, N., et al. (2024d). Guidance for one health field epidemiology learning evaluation and certification. Geneva: World Health Organization, Food and Agriculture Organization of the United Nations, and World Organisation for Animal Health,. doi:<https://doi-org.bibliosan.idm.oclc.org/10.20506/cohfe.3435>

B. Alessandrini, C. Budke, J. Cargill, D. Castellan, S. D'Albenzio, N. Dhand, et al. (2024e). Guidance for one health field epidemiology learning evaluation and certification: A supplemental manual to the competencies for one health field epidemiology (COHFE) framework. Geneva: World Health Organization, Food and Agriculture Organization of the United Nations, and World Organisation for Animal Health,. doi:<https://doi-org.bibliosan.idm.oclc.org/10.20506/cohfe.3436>

11. What have you done in the past year to advance your area of focus, e.g. updated technology?

- *Mapping training initiatives on the welfare of ruminants, equines, pigs, poultry, small farm animals and aquatic animals in the EU Member States*
- *Development of a permanent IT platform for the assessment of training impact in the animal welfare domain as concerns ruminants and equine in EU Member States*
- *Use of interaction platform (e.g. Slido) to engage participants with live polls during webinars*
- *Use of tools (e.g. Qualtrics) to develop surveys, collect and analyse data*
- *Preliminary study for the introduction of metaverso in laboratory training planned in 2025*

12. Additional comments regarding your report: