

VET Spotlight

The newsletter of the Department of Veterinary
Sciences at the University of Pisa



The Veterinary Analytical Center of Excellence (CAVE): advanced technologies for veterinary research

The Department of Veterinary Sciences is pleased to present the Veterinary Analytical Center of Excellence (CAVE), developed as part of the **OSCAR 2023–2027 Excellence Project**. CAVE is a strategic infrastructure that integrates research, training, and service activities, coordinating spaces, expertise, and advanced instrumentation through shared procedures that foster **collaboration between research groups**.

OSCAR funding enabled the acquisition of high-profile technologies, including a MiSeq NGS sequencing platform, an ICP MS spectrometer, a high-resolution LC MS QTOF system, and a confocal array detector microscope for high-resolution imaging. These endowments expand the Department's analytical and diagnostic capabilities and consolidate CAVE's role as a reference infrastructure.

The Center's activities are organized into six **Laboratory Units**:

- UL1 – Microscopy and Pathological Diagnostics;
 - UL2 – Microbiological, Biochemical and Molecular Analyses;
 - UL3 – Chemical-physical analyses;
 - UL4 – Diagnostics of Infectious and Parasitic Diseases;
 - UL5 – Translational Medicine;
 - UL6 – Evaluation of the Human-Animal-Environment Relationship.
- This articulation allows for the integration of different skills and address research questions from a multidisciplinary perspective.

CAVE also supports training through seminars dedicated to new technologies. Future objectives include strengthening collaborations with other Departments and territorial authorities, developing new lines of research, gradually opening instruments to external users, and strengthening third-party account activities.



SPOTLIGHT- CAVE

PhD corner

"Hidden Parasites: Exploring the Diversity of Tick-Borne Protozoa in Wild Carnivores from North-Western Italy"

Emily Sel, PhD student in Veterinary Sciences, Parasitology and Parasitic Diseases of Animals and Humans, under the supervision of Dr. Lisa Guardone, participated in the XXXIV National Congress of the Italian Society of Parasitology (Bologna, 23-26/06/2026), presenting an oral contribution entitled *"Hidden Parasites: Exploring the Diversity of Tick-Borne Protozoa in Wild Carnivores from North-Western Italy"*. The research, conducted in collaboration with the Experimental Zooprophyllactic Institute of Piedmont, Valle d'Aosta, and Liguria, analyzed 500 spleen samples from wild carnivores in northwestern Italy, highlighting the circulation of several species of *Babesia* spp. and *Hepatozoon* spp. The findings suggest a role for wildlife in the epidemiology of tick-borne pathogens and the importance of surveillance from a One Health perspective. At the same conference, Emily Sel also presented a poster titled *"Occurrence of Tick-Borne Pathogens in Wild Cervids: A Molecular Study in Poland"*, which highlighted the presence of *Anaplasma phagocytophilum* and *Theileria capreoli* in Polish wild cervids, highlighting their role as potential reservoirs and the importance of wildlife monitoring. Co-authors of the project include Barbara Moroni, Serena Robetto, Livia De Paolis and Valeria Listorti.

"It was a useful opportunity to share the results of my PhD project, listen to different experiences and approaches, and broaden my perspective on the study of parasitology and tick-borne diseases."

"Bacterial microbiota analysis of *Hermetia illucens* larvae feed with meat-based former foodstuffs"

During the International Congress "Insects to Feed the World" (IFW), held in Turin from 8 to 12 June 2026, **Gabriele Spatola**, PhD student in Veterinary Sciences, Animal Food Inspection Sector, and FishLab research group member, under the supervision of Prof. Andrea Armani gave a presentation entitled *"Bacterial microbiota analysis of *Hermetia illucens* larvae feed with meat-based former foodstuffs"*. The work delved into variations in the bacterial microbiota of *Hermetia illucens*, an edible insect capable of bioconverting previously consumed food products and food waste into food and feed sources. The study is part of a circular economy perspective, with the aim of further exploring the potential applications of this species and assessing any risks to food and feed safety. The work was created in collaboration with Simone Mancini, Asia Zanzot and Emma Copelotti.

"I am very happy to have participated in such an important international event and to have had the opportunity to present our work, sharing the results and engaging with researchers from around the world."





"Validation of a set of indicators for assessing food safety culture: preliminary results from an Italian-Finnish project"

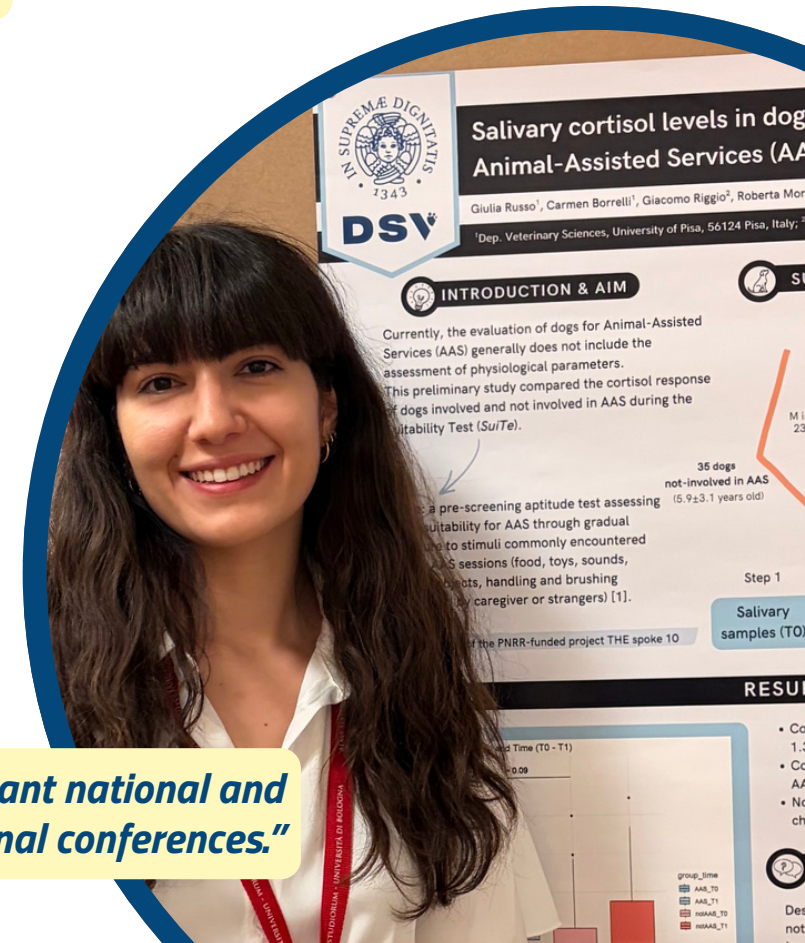
An Italian-Finnish collaboration on the evaluation of Food Safety Culture was the focus of the contribution presented by **Andrea Gori**, PhD student in Veterinary Sciences, Animal Food Inspection Sector, and FishLab research group member, under the supervision of Prof. Roberta Nuvoloni and Prof. Andrea Armani, at the Nordic Network for Food Control Research Seminar 2026, held in Uppsala, Sweden, on June 4-5, 2026. The doctoral student orally presented the work "Validation of a set of indicators for assessing food safety culture: preliminary results from an Italian-Finnish project", dedicated to the development and validation of indicators to support Competent Authorities in assessing Food Safety Culture during official controls. The study involved official Italian and Finnish veterinarians, with the aim of making the assessment more harmonized and reproducible.

"The seminar was an important opportunity to engage with researchers and relevant authorities from across Northern Europe, from whom I returned with new ideas and perspectives."

"Animal Welfare in Animal Assisted Services (AAS): A Multiparametric Assessment"

Giulia Russo, PhD student in Physiology, ethology and the relationship between humans and animals under the supervision of Professor Chiara Mariti, presented part of the results of her project on the well-being of animals involved in Animal Assisted Services (AAS) at two international conferences: SISVET 2026 (Bologna), with the presentation of a poster, and ISAZ 2026 (Paris), where she gave an oral presentation. The contributions explored the well-being of dogs and cats involved in AAS through the analysis of physiological, behavioral, and caregiver perception indicators.

"It was nice to be able to present these topics, still little explored in research, at two important national and international conferences."



SEND US YOUR QUESTION

Do you have a curiosity about the world of veterinary sciences?

Fill in the [form](#) and tell us what would you like to know more about. We would be happy to answer your questions!

COLLABORATE WITH US

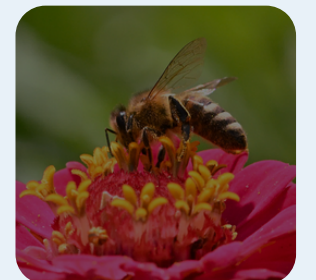
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KICK-OFF MEETING - PROGETTI FIS

WHO GAVE LIFE TO POLLINETWORK?



Don't miss the next issue of VET Spotlight! **Discover the latest updates from the world of scientific research.**