Veterinary Internal Medicine, Pharmacology and Toxicology

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School of Biosciences and Veterinary Medicine

Research Day UNICAM
Camerino 12 dicembre 2024

MEDVET-04/A-B

Permanent/temporary staff ratio

(1PO, 5PA, 2Res / 5 PhD Student, 1 Research Fellow)

Characterizing studies

Approach and management of small animal gastroenterology. Canine and feline fecal proteome in health and disease

Pharmacologic residues detection in food and feed, functional natural products, nanotechnological coatings

Veterinary cardiology

Advanced diagnostic tools in large animals

Study of hematological alterations in canine and feline cancer

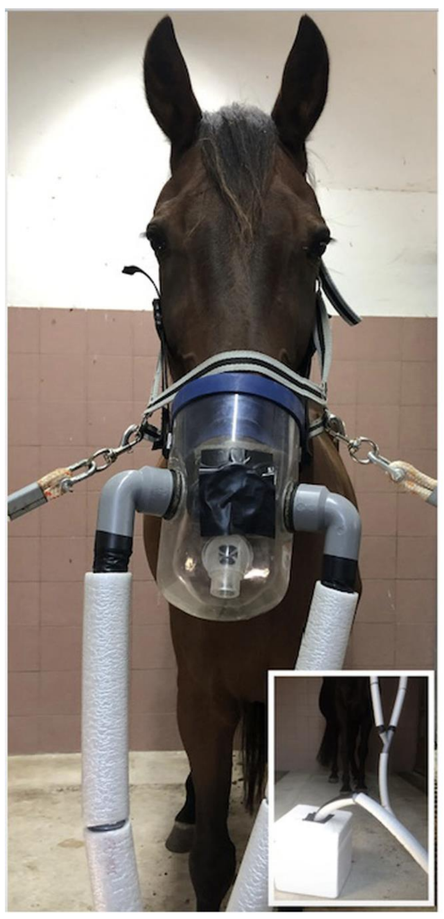
Photobiomodulation in the form of fluorescent light energy (FLE) for the management of dermatological and other cutaneous diseases of animals

International and National impact of research

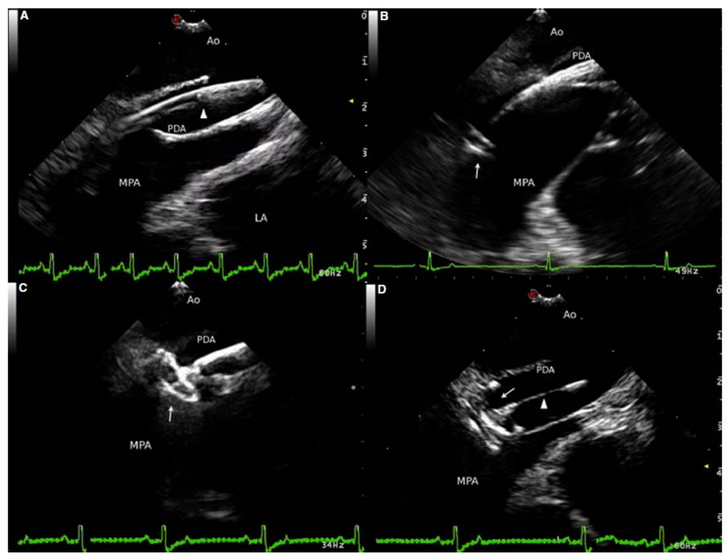
Development of innovative diagnostic (e.g. clinical metabolomics, algorithm for canine chronic enteropathies) and therapeutic protocols (e.g. Photobiomodulation in dermatology; lymphoma vaccination, ultrasound-guided cardiac procedures, nanodrug delivery) in veterinary medicine and in the context of translational medicine in a one-health perspective.

International Collaboration

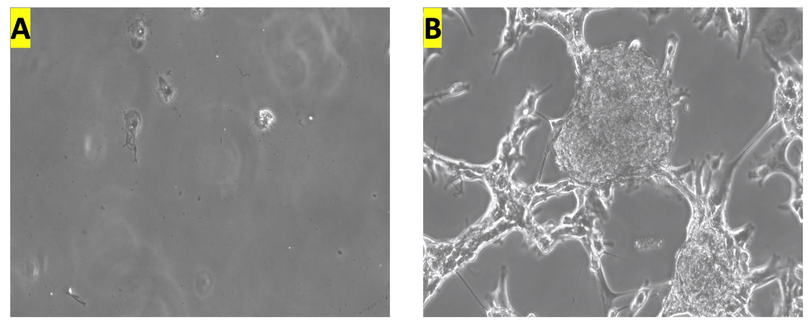
The main international collaborations concern European (e.g. Utrecht, Hannover, Madrid) and extra-European (e.g. Davis, Texas, Iowa, Cinvestav, Ariel, Zagazig, Takasaki) universities and institutions to carry out research that aims to enhance the health and welfare of both animals and humans, as well as collaborate on research projects.



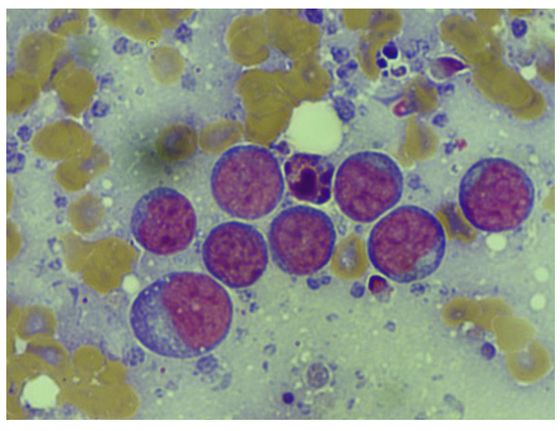
Collection of Exhaled breath condensate



Transesophageal ultrasonographic image of heart during cardiac procedures



Malignant glioblastoma cells on **(A)** uncoated and **(B)** nanotechnological coating



Cytology: canine lymphoma

Relation with companies

Relationships with companies aim to identify common objectives in order to create links between the enterprise and academia, and to promote development and technology transfer in veterinary biomedical, diagnostic and therapeutic fields.
Photobiomodulation studies led to the development of the first fluorescent light therapy device in veterinary medicine (Klox Technologies). Nanotechnology studies led to the development of antibacterial coatings suitable for food and health industry (Moma Nanotech). Natural products studies led to development of functional formulations for veterinary medicine.

Role in Scientific Societies and International networks

The researchers belonging to this group are part of several scientific sciences and international networks including:
European canine lymphoma network, European College of Veterinary Clinical Pathology, American Academy of Veterinary Pharmacology and Therapeutics, International donkey diseases network.

Fundings

Private fundings
(e.g. pharmacology, diagnostic and therapeutic tools);
EU-Regional fundings – PSR (health monitoring) and POR Marche FSE 2014-2020.