

# Associate Laboratory for Animal and Veterinary Sciences Emergent Infectious Diseases and Zoonosis - Big Data

Faculdade de Medicina Veterinária da Universidade de Lisboa, NOV 29<sup>th</sup>-30<sup>th</sup> 2023 | Auditório B

## PROGRAMME

NOV 29<sup>th</sup>, Wednesday

### 08:30 Registration

### 09:00 Opening Session

**Esmeralda Delgado**, vice-president of the Faculdade de Medicina Veterinária, Universidade de Lisboa

**Susana Guedes Pombo**, director of Direção Geral de Alimentação e Veterinária (DGAV)

**Luis Lopes-da-Costa**, director of AL4AnimalS

**Alexandre Leitão**, coordinator of thematic line 2 of AL4AnimalS

### 09:30 SESSION: Image | Chair: Andrew Hemphill, U Bern

#### Image data analysis and interpretation: machine learning dimensions

Keynote speaker: **Adrian Hehl** | Institute of Parasitology, Vetsuisse Faculty, University of Zurich, Switzerland

### 10:15 Free oral communications

#### Enhancing research on endometrial physiology and pathophysiology in postpartum dairy cows with laser capture microdissection

Gonçalo Pereira

### 10:35 Coffee break and poster viewing

### 11:00 Poster oral short presentations | Chair: António Duarte, ULisboa; Isabel Pereira da Fonseca, ULisboa

#### Decoding the genomic landscape of *Staphylococcus aureus* isolated from chicken bursitis: unraveling antibiotic resistance and virulence mechanisms

Patricia Poeta

#### Phenotypic characterization of *Enterococcus* spp. isolated from chickens for human consumption

Patricia Poeta

#### Antibiotic resistance profile in *Escherichia coli* isolated from livestock: Focus on rabbits and pigs in food animals

Patricia Poeta

#### Bats, a beacon of hope in antimicrobial resistance

Patricia Poeta

#### Biofilms in cat-derived *Pseudomonas aeruginosa*: insights into formation and implications

Patricia Poeta

#### Bioinformatics designing of an epitope-based vaccine for Bovine Genital

#### Campylobacteriosis

Maria Elisabete Silva

**Comparison of Skin Prick Tests (SPT), Intradermal Tests (IDT) and In Vitro Tests in the Characterization of Insect Bite Hypersensitivity (IBH) in a Population of Lusitano Horses: “Contribution for Future Implementation of SPT in IBH Diagnosis”.**

Vera Pessoa

**Ex-Vivo Permeation Of P28, an Azurin Derived Cell-Penetrating Peptide, to Enhance the Ocular Delivery of Erythropoietin Encapsulated into Nanoparticles**

Gonçalo Santos

**First Evaluation of the Use of Foxim as a Contribute to the Control of Gasterophilus intestinalis Burden in Horses at Pasture: a Pilot Study**

Teresa Rodrigues

**Production of parasitic recombinant proteins for combination therapy against schistosomiasis**

Maria João Gouveia

**Climatic factors and parasite infection in dogs and cats of the Azores islands**

Romana Teixeira

**Detection of Canine Vector-Borne Diseases agents in Galgo Español used as hunting dogs in Alentejo, Portugal**

Maria Francisca Esteves

**Ticks (Ixodidae) collected on cattle and tick-borne pathogens at traditional housing systems in Huambo, Angola**

Esmeralda Inácio

**Toxoplasma gondii: experimental infection and study of the immune and inflammatory response using different genotypes**

Inês Fançony

**Toxoplasma gondii and Mental Health: Reinforcing the Link**

Maria Manuel Fernandes

**Overview of Cryptosporidium spp. and Giardia spp. in animals in Portugal in a three-year period**

Mariana Louro

**Searching for Cryptosporidium infection in bats from Brazil**

Pedro Andrade

**Encephalitozoon Cuniculi Seroprevalence and Analytical Trends in the Population of Pet Rabbits Attending FMV-Ulisboa Veterinary Teaching Hospital**

Ana Reinho

**13:00 Lunch**

**14:30 SESSION: Omics** | Chair: Adrian Hehl, U Zurich; Telmo P. Nunes, ULisboa

**Microbiome and antibiotic resistance**

**Keynote speaker: Isabel Gordo** | Fundação Calouste Gulbenkian - Instituto Gulbenkian de Ciência, Evolutionary Biology Group

**15:15 Application of differential affinity chromatography coupled to MS and proteomics for the identification of drug targets and for studies on the mode of action of anti-parasitic drugs**

**Invited speaker: Andrew Hemphill** | Institute of Parasitology, Vetsuisse Faculty, University of Bern, Switzerland

**15:35 Applications of -omics to the study of host-pathogen interactions in animal diseases: ruminant apicomplexans parasites as an example**

**Invited speaker: Luis Miguel Ortega-Mora** | SALUVET Group, Animal Health Department, Faculty of Veterinary Sciences, Complutense University of Madrid, Spain

**15:55 Genomics for sustainability: identifying rare mutations of interest by the exploration of local genetic resources in Portuguese-speaking African countries**

**Invited speaker: Andreia Amaral** | Escola de Ciência e Tecnologia, Universidade de Évora; Centre for Interdisciplinary Research in Animal Health (CIISA), Faculty of Veterinary Medicine, University of Lisbon; Associate Laboratory for Animal and Veterinary Sciences (AL4AnimalS)

**16:15 Coffee break and poster viewing**

**16:45 SESSION: Disease surveillance (1<sup>st</sup> PART)** |

Chair: Isabel Gordo, FCG IGC; Fernanda Dórea, SVA Sweden

**Free oral communications**

**Interoperability structure for farm data sources and databases to monitor and manage antimicrobial consumption in animal production - the case for USAM SuLei.**

João Niza Ribeiro

**Environmental Contamination and Staff Colonization by Carbapenem-Resistant Gram-Negative Bacteria in Small Animal Veterinary Practices**

Joana Moreira da Silva

**Carriage of Carbapenemase and ESBL-producing Escherichia coli in dogs and cats in veterinary care and co-carriage with their owners**

Juliana Menezes

**Exploring trends of resistance of Klebsiella spp. in companion animal infections: a three-year study**

Laura Fernandes

**Biological and genetic characterization of Echinococcus implications for dynamics of transmission**

António Castro

**Encephalitis Project**

José Manuel Correia da Costa

**19:00 Dinner**

**09:00 SESSION: Disease surveillance (2<sup>nd</sup> PART) |**Chair: **Luis Ortega-Mora**, SALUVET U Complutense Madrid; **Yolanda Vaz**, DGAV Lisboa**Data-driven early disease detection: automated workflows and decision-support in animal health surveillance**Keynote speaker: **Fernanda C. Dórea** | Global Project Coordinator, FAO & National Veterinary Institute (SVA), Sweden**09:45 Little Stories About Increasing Quantities of Big Data: A Data Analyst's Perspective**Invited speaker: **Paulo Jorge Nogueira** | Escola Nacional de Saúde Pública, Universidade Nova de Lisboa**10:05 Detection and quantification of excessive mortality events in Portuguese bovine populations**Invited speaker: **Telmo Nunes** | Faculdade de Medicina Veterinária, Universidade de Lisboa**10:25 Coffee break and poster viewing****10:45 Free oral communications****Estimating Lagged Risks of Temperature Exposure: Insights from Hospital Admissions for Infectious and Parasitic Diseases**

Maria Oliveira

**Feline Immunodeficiency Virus Hospitalization: Insights from a Comprehensive Epidemiological Database using Predictive Modelling**

Miguel Maximino

**C Reactive Protein/Albumin Ratio as a SRIS Indicator in Dogs with Parvovirus**

Diana Lopes

**Evaluation of SARS-CoV-2 susceptibility in cats: serological survey for antibodies against the virus**

Isa Moutinho

**Unravelling (new) neurotropic viruses - AL4animals Project Outline**

Líbia Zé-Zé

**Examination of a herd experiencing Neospora caninum-associated abortion by a mouse monoclonal antibody-based competitive ELISA**

João Crisóstomo

**Immunomagnetic separation method for identification of Toxoplasma gondii oocysts in environmental samples**

Susana Sousa

**Toxoplasma gondii detection in pre-harvested vegetables in the North of Portugal**

Cláudia Marques

**Uncovering Zoonotic Toxoplasma Gondii Genetic Diversity and its Implication on Toxoplasmosis Pathogenesis – A One Health Approach (AL4animals Project Management Framework)**

Cláudia Marques

**12:45 Closing Session****13:00 Lunch**